Program Directory for

VM Batch Facility

Version 2
Release 2

Program Number 5684-137

for Use with
VM/ESA 370 Feature 1.0 or later
VM/ESA 2.0 or later

Document Date: November 1993

xxxx-yyyy-zz

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 November 1993, applies to VM Batch Facility Version 2 Release 2 (VM Batch Facility V2.2), Program Number 5684-137 for the following:

COMPIDs	Feature Numbers	System Name
568413701	5870	VM/ESA
	5871	
	5872	
	5874	

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Remote Spooling Communications Subsystem (RSCS)
VM Batch Facility

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 and maintenance of VM Batch Facility V2.2. 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 VM Batch Facility V2.2.
- 3.0, “Program Support” on page 5 describes the IBM support available for VM Batch Facility V2.2.
- 4.0, “Program and Service Level Information” on page 6 lists the APARs (program level) and PTFs (service level) incorporated into VM Batch Facility V2.2.
- 5.0, “Installation Requirements and Considerations” on page 7 identifies the resources and considerations for installing and using VM Batch Facility V2.2.
- 6.0, “Installation Instructions” on page 13 provides detailed installation instructions for VM Batch Facility V2.2.
- 7.0, “Service Instructions” on page 35 provides detailed servicing instructions for VM Batch Facility V2.2.
- Appendix A, “Modifying Installation Exits and the CONTROL FILE” on page 47 provides instructions on how to modify the installation exits and CONTROL FILE for VM Batch Facility V2.2.
- Appendix B, “Listing of Sample CONTROL FILE” on page 50 provides a listing of the CONTROL FILE that is shipped with VM Batch Facility V2.2.
- Appendix C, “Changing Installation Defaults: Creating an Override” on page 52 provides further instructions for overriding the default installation information.
- Appendix D, “Setting up the Proper RACF Access Authorities” on page 56 provides the commands necessary for setting up the RACF environment necessary for VM Batch Facility V2.2.

Before installing VM Batch Facility V2.2, 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 VM Batch Facility V2.2 is 5684-137.

The program announcement material describes the features supported by VM Batch Facility V2.2. Ask your IBM marketing representative for this information if you have not already received a copy.

The following sections identify the basic and optional program materials available with this program.

2.1 Basic Machine-Readable Material

The distribution medium for this program is 9-track magnetic tape (written at 6250 BPI) and 3480 tape cartridge. The tape or cartridge contains all the programs and data needed for installation. See 6.0, “Installation Instructions” on page 13 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
5870	1600 bpi tape	1	VM Batch Facility Product Code	Base Product 1of1
5871	6250 bpi tape	1	VM Batch Facility Product Code	Base Product 1of1
5872	3480 cart.	1	VM Batch Facility Product Code	Base Product 1of1
5874	0.25 inch tape	1	VM Batch Facility Product Code	Base Product 1of1

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

Tape File	Content
1	Tape Header
2	Tape Header
3	Product Header
4	Product Header
5	Service Apply Lists
6	PTFPARTs
7	VM Batch Facility V2.2 Service

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

Tape File	Content
8	VM Batch Facility V2.2 Service
9	VM Batch Facility V2.2 Base Code
10	VM Batch Facility V2.2 Sample and Local Files
11	VM Batch Facility V2.2 Executable Monitor Code
12	VM Batch Facility V2.2 Help Files
13	VM Batch Facility V2.2 General User Code
14	VM Batch Facility V2.2 Softcopy Publications

2.2 Program Publications

The following sections identify the basic and optional publications for VM Batch Facility V2.2.

2.2.1 Basic Program Publications

One copy of the following publication is included when you order the basic materials for VM Batch Facility V2.2. For additional copies, contact your IBM representative.

Figure 3. Basic Material: Unlicensed Publications

Publication Title	Form Number
VM Batch Facility Licensed Program Specifications	GC24-5571
VM Batch Facility General Information Manual	GC24-5572
VM Batch Facility Installation, Customization, and Administration	SC24-5573
VM Batch Facility User's Guide	SC24-5574

2.3 Microfiche Support

There is no microfiche for VM Batch Facility V2.2.

2.4 Publications Useful During Installation

The publications listed in Figure 4 may be useful during the installation of VM Batch Facility V2.2. To order copies, contact your IBM representative.

Figure 4. Publications Useful During Installation

Publication Title	Form Number
VM/ESA VMSES/E Introduction and Reference	SC24-5444
VMSES/E 370 Feature Introduction and Reference for Licensed Products	SC24-5659
VM/ESA CP Planning and Administration	SC24-5521
VM/ESA Service Guide	SC24-5527
VM/ESA SFS and CRR Planning, Administration and Operation	SC24-5649
VM/ESA CMS Command Reference	SC24-5461
VM/ESA System Messages and Codes	SC24-5437
RACF Command Language Reference	SC28-0733

3.0 Program Support

This section describes the IBM support available for VM Batch Facility V2.2.

3.1 Preventive Service Planning

Before installing VM Batch Facility V2.2, check with your IBM Support Center or use either Information/Access or IBMLink (Service Link) 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**
568413701	220	VMBATCH	VMBATCH/220

3.2 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. In the U.S.A., if an APAR is required, submit the data to the location identified in the *Programming System General Information* (PSGIM) manual (G229-2228) as being responsible for the failing component.

Figure 6 identifies the component ID (COMPID), RETAIN Release and Field Engineering Service Number (FESN) for VM Batch Facility V2.2.

Figure 6. Component IDs

	RETAIN		
COMPID	**Release**	**Component Name**	**FESN**
568413701	220	VM Batch Facility 2.2	0460886

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of VM Batch Facility V2.2. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated. Information about the cumulative service tape is also provided.

4.1 Program Level Information

The following APAR fixes against previous releases of VM Batch Facility have been incorporated into this release:

GC02750	GC04262	GC04432	GC04609	GC04823	GC04965
GC03829	GC04316	GC04457	GC04670	GC04826	GC04966
GC03904	GC04334	GC04495	GC04675	GC04869	GC05025
GC04074	GC04337	GC04509	GC04690	GC04888	GC05093
GC04189	GC04373	GC04512	GC04741	GC04895	GC05110
GC04243	GC04405	GC04527	GC04742	GC04904	GC05145
GC04251	GC04409	GC04539	GC04750	GC04907	GC05202
GC04253	GC04410	GC04547	GC04777		

4.2 Service Level Information

This is the initial shipment of VM Batch Facility V2.2 and there are no PTFs.

4.3 Cumulative Service Tape

There is no cumulative service tape for VM Batch Facility V2.2.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating VM Batch Facility V2.2.

5.1 DASD Storage and User ID Requirements

The following lists the default User IDs that VM Batch Facility V2.2 requires for installation.

P684137A Default installer user ID

BATCH Default user ID for VM Batch Facility V2.2 production monitor virtual machine

BATCH1 Default user ID for VM Batch Facility V2.2 production task machine 1

BATCH2 Default user ID for VM Batch Facility V2.2 production task machine 2

TBATCH Default user ID for VM Batch Facility V2.2 test monitor virtual machine

TBATCH1 Default user ID for VM Batch Facility V2.2 test task machine 1

TBATCH2 Default user ID for VM Batch Facility V2.2 test task machine 2

Figure 7 on page 8 lists the user IDs and minidisks that are used to install, test and service VM Batch Facility V2.2.

Important Installation Notes:

- The installation user ID and minidisks will be defined in 6.1.1, “Plan Your Installation” on page 13 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.
- If you choose to change the default installation user ID, **P684137A**, you must ensure that all the virtual minidisk addresses for VM Batch Facility V2.2 are unique on the new installation user ID. You will have to create a PPF override to resolve any minidisk address conflicts. This can be done in 6.1.1, “Plan Your Installation,” Step 7 on page 14 .

Figure 7 (Page 1 of 4). DASD Storage Requirements for Target Minidisks

Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			
P684137A	2B2	9345 3390 3380 3375 3350	3 3 3 5 4	3600	450	Contains all the base code shipped with VM Batch Facility V2.2
P684137A	2C2	9345 3390 3380 3375 3350	2 2 2 4 3	2400	300	Contains sample files and user local modifications for VM Batch Facility V2.2
P684137A	2D2	9345 3390 3380 3375 3350	10 9 10 16 13	12000	1500	Contains serviced files
P684137A	2A6	9345 3390 3380 3375 3350	2 2 2 4 3	2400	300	Contains AUX files and version vector table that represent your test level of VM Batch Facility V2.2
P684137A	2A2	9345 3390 3380 3375 3350	2 2 2 4 3	2400	300	Contains AUX file and version vector table that represent your production level of VM Batch Facility V2.2
P684137A	196	9345 3390 3380 3375 3350	2 2 2 4 3	2400		Production build disk for monitor machine
P684137A	296	9345 3390 3380 3375 3350	2 2 2 4 3	2400		Test build disk for monitor machine

Notes:

1. Cylinder values defined in this table are based on a 4k block size. FB-512 block values and SFS 4k block values are derived from the 3380 cylinder values.
2. If a disk has no entry under the SFS Blocks column then that disk cannot be allocated in Shared File System.

Figure 7 (Page 2 of 4). DASD Storage Requirements for Target Minidisks

Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			
P684137A	29D	9345 3390 3380 3375 3350	1 1 1 2 1	1200	150	Help files **note:** This is also the amount of free space required on MAINT's 19D disk.
P684137A	191	9345 3390 3380 3375 3350	10 9 10 16 13	12000	1500	P684137A user ID's 191 minidisk
P684137A	29E	9345 3390 3380 3375 3350	3 3 3 5 4	3600		Test version of MAINT's 19E disk. **note:** This is also the amount of free space required on MAINT's 19E disk.
P684137A	22D	9345 3390 3380 3375 3350	2 2 2 4 3	2400	600	Softcopy Publications
BATCH	191	9345 3390 3380 3375 3350	1 1 1 1 1	1200		Monitor's A-disk
BATCH	193	9345 3390 3380 3375 3350	5 5 5 8 7	6000		User job files disk
BATCH	194	9345 3390 3380 3375 3350	1 1 1 2 1	1200		Work files

Notes:

1. Cylinder values defined in this table are based on a 4k block size. FB-512 block values and SFS 4k block values are derived from the 3380 cylinder values.
2. If a disk has no entry under the SFS Blocks column then that disk cannot be allocated in Shared File System.

Figure 7 (Page 3 of 4). DASD Storage Requirements for Target Minidisks

Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			
BATCH	195	9345 3390 3380 3375 3350	1 1 1 2 1	2400		Accounting data
BATCH	199	9345 3390 3380 3375 3350	1 1 1 2 1	1200		CONTROL FILE and monitor installation exits
BATCH1	191	9345 3390 3380 3375 3350	2 2 2 4 3	2400		BATCH1 work disk
BATCH2	191	9345 3390 3380 3375 3350	2 2 2 4 3	2400		BATCH2 work disk
TBATCH	191	9345 3390 3380 3375 3350	1 1 1 1 1	1200		Test monitor's A-disk
TBATCH	193	9345 3390 3380 3375 3350	5 5 5 8 7	6000		User job files disk
TBATCH	194	9345 3390 3380 3375 3350	1 1 1 2 1	1200		Work files

Notes:

1. Cylinder values defined in this table are based on a 4k block size. FB-512 block values and SFS 4k block values are derived from the 3380 cylinder values.
2. If a disk has no entry under the SFS Blocks column then that disk cannot be allocated in Shared File System.

Figure 7 (Page 4 of 4). DASD Storage Requirements for Target Minidisks

Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			
TBATCH	195	9345 3390 3380 3375 3350	1 1 1 2 1	1200		Accounting data
TBATCH	199	9345 3390 3380 3375 3350	1 1 1 2 1	1200		CONTROL FILE and monitor installation exits
TBATCH1	191	9345 3390 3380 3375 3350	2 2 2 4 3	2400		TBATCH1 work disk
TBATCH2	191	9345 3390 3380 3375 3350	2 2 2 4 3	2400		TBATCH2 work disk

Notes:

1. Cylinder values defined in this table are based on a 4k block size. FB-512 block values and SFS 4k block values are derived from the 3380 cylinder values.
2. If a disk has no entry under the SFS Blocks column then that disk cannot be allocated in Shared File System.

5.2 Program Considerations

If you run CMS Release 7 on a user ID which is defined with more than 16 megabytes of virtual storage then VM Batch Facility will encounter an error when the code issues a PROGMAP command. If you must run CMS Release 7 then make sure that the user ID is defined with a virtual storage size of 16 megabytes or less. This problem affects both job submittor user IDs and task machine user IDs.

Installation of the following corequisite products will provide optional additional function. Refer to the documentation for the individual corequisite products for additional information.

- Interactive System Productivity Facility (ISPF) (5684-043) Version 3 Release 2 for VM must be installed for full screen menu interface capability.
- Resource Access Control Facility/VM (RACF) (5740-XXH) Version 1 Release 9 or later must be installed for security, auditability, and control capabilities beyond those available in the VM Operating

System and VM Batch Facility V2.2. VM Batch Facility V2.2 will also work with other security software products that use common programming interfaces.

- Remote Spooling Communications Subsystem (RSCS) (5664-188) Version 2 Release 3 or later must be installed for Remote Job Entry capabilities or cross-domain access.
- IBM BookManager READ or IBM Library Reader is required to view the softcopy publications that are shipped with VM Batch Facility V2.2.

5.3 Programming Requirements

Use VMSES/E when installing and servicing this program on the following VM platforms:

- VM/ESA 2.0 or higher.
- VM/ESA 1.0 370 Feature + VMSES/E 370 Feature for Licensed Programs (#7806)

When running VM Batch Facility V2.2 on VM/ESA 1.0 370 Feature, PTF UM24908 (APAR VM54104) must be applied. VM54104 addresses a CMS EXECMAP problem when running under VM/ESA 1.0 370 Feature.

5.4 Program Installation/Service Considerations

This section describes items that should be considered before you install or service VM Batch Facility V2.2

- 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.

6.0 Installation Instructions

This chapter describes the installation methods and the step-by-step procedures to install and activate VM Batch Facility V2.2.

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*.

6.1 Installation of VM Batch Facility V2.2 with VMSES/E (VMFINS)

VMFINS will be used to install VM Batch Facility V2.2. VMFINS is an installation aid supplied as part of VMSES/E to make installation of VM and Licensed Programs (LPs) consistent.

For a complete description of all VMFINS installation options refer to:

- *VMSES/E Introduction and Reference* (SC24-5444)
- *VMSES/E 370 Feature Introduction and Reference for Licensed Programs* (SC24-5659)

The “Install Scenarios” chapter illustrates how various VMFINS operands and options are used.

6.1.1 Plan Your Installation

The VMFINS command will be used to plan the installation. This is a two step process that will:

- load the first tape file, containing VM Batch Facility V2.2 PPF and PRODPART files
- generate a PLANINFO file that lists
  - all user ID and minidisk requirements
  - required products

1 Logon as the VM Batch Facility V2.2 installation planner. This user ID can be any ID that has read access to **MAINT**'s 5E5 minidisk (or **SESELPS**'s EE5 minidisk if installing on VM/ESA Release 1.0 370 Feature) and write access to MAINT's 51D minidisk (or **SESELPS**'s 51D minidisk if installing on VM/ESA Release 1.0 370 Feature).

2 Mount the VM Batch Facility V2.2 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 If installing on VM/ESA Release 1.0 370 Feature, ensure the user ID is running in ECMODE.

set ecmode on
ipl cms

Re-IPLing CMS is necessary for the change to take effect.

4 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**'s **EE5** disk.

5 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**'s **51D** disk.

The **MAINT** 51D minidisk is where the VMSES/E system level inventory files reside.

6 Load the product memos.

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. If you would like a prompt to send the memos to the printer do not specify NOMEMO.

This command will perform the following:

- load Memo-to-Users
- load the product control files (PPF and PRODPART)
- create VMFINS PRODLIST on your A-disk. The VMFINS PRODLIST contains a list of products on the installation tape.

Sample VM/ESA 2.1 Console Output

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

End of Sample VM/ESA 2.1 Console Output

7 Obtain resource planning information for VM Batch Facility V2.2.

vmfins install {prod|ppf} 5684137A {batchins|batchsfsins} (plan nomemo

Use **prod** if installing on VM/ESA Release 1.0 370 Feature and you want the opportunity to change the installation defaults. Use **ppf** if installing on VM/ESA Release 2.0 and above or if installing on VM/ESA Release 1.0 370 Feature and you do not need to change any installation defaults.

Use **batchins** if installing to minidisks or **batchsfsins** if installing to SFS.

The PLAN option indicates that you want VMFINS to 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

Important notes about changing default installation parameters

1. If you plan to change the default values such as PPF name, installation user ID or any minidisk and/or shared file directories, you should first read Appendix C, "Changing Installation Defaults: Creating an Override" on page 52 for more information regarding the changes that are made.
2. If you change any of the default values, you must ensure that you change all instructions in this Program Directory appropriately.

Note: The product will not be loaded by the VMFINS command at this time.

Sample VM/ESA 2.1 Console Output

```
VMFINS2760I VMFINS processing started
VMFREQ2805I Product 5684137A component BATCHINS passed requisite checking
Do you want to create an override for 5684137A BATCHINS (prodid 5684137A)?
Enter 0 (No), 1 (Yes) or 2 (Exit)
```

0

Enter **0** to bypass creating an override.

Enter **1** to create an override to change the default installation user ID, change the name of the PPF, and/or change the minidisk/directory definitions.

Enter **2** to exit the VMFINS EXEC.

```
VMFRMT2760I VMFRMT processing started
VMFRMT2760I VMFRMT processing completed successfully
VMFPLA1909I 5684137A PLANINFO created on your A-disk
VMFINS2760I VMFINS processing completed successfully
```

End of Sample VM/ESA 2.1 Console Output

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

vmfview install

6.1.2 Allocate Resources for Installing VM Batch Facility V2.2

You will use the planning information in the 5684137A PLANINFO file, created in the **PLAN** step, to:

- Create the following directory entries:
  - P684137A
  - BATCH
  - BATCH1
  - BATCH2
  - TBATCH
  - TBATCH1
  - TBATCH2

  Note: If you are migrating from a previous release of VM Batch Facility you will need to update the existing directory entry for **BATCH**. Skip making those changes to your existing **BATCH** during this section. You will be directed to make the necessary changes later in 6.2, “Migrate from a Previous Release of the Product” on page 28.
- Place the new directory on-line

1 Obtain the directory from the 5684137A PLANINFO file.

Refer to “How the Task Machines are Defined” and “How the Monitor Machine is Defined” in *VM Batch Facility Installation, Customization, and Administration* for a description of the required statements.

Note: The user directory entries are located at the bottom of the file. This will contain all of the necessary links and privilege classes for the required user IDs.

2 Change the password and account code for each user ID to conform to your installation standards.

3 If installing on VM/ESA Release 1.0 370 Feature:

- **a** Remove the MACHINE 370 statement from the directory entry for the **BATCH** and **TBATCH** user IDs.
- **b** Add an OPTION ECMODE statement to the directory entry for the **P684137A** user ID.
- **c** Add a LINK SESELPS EE5 EE5 RR statement to the directory entry for the **P684137A** user ID. Remove the link to MAINT 5E5.
- **d** Add a LINK SESELPS 51D 51D RR statement to the directory entry for the **P684137A** user ID. Remove the link to MAINT 51D.

4 If you are using SFS then you will need to do the following:

- **a** Add the MDISK statements for the 196, 296, and 29E minidisks to the **P684137A** directory entry.
- **b** To use an SFS directory as the A-disk for the **P684137A** user ID, change the IPL statement to IPL CMS PARM FILEPOOL VMSYS: (VMSYS: is the default filepoolid).
- **c** If you are **not** using an SFS directory as the A-disk for the **P684137A** user ID, add the MDISK for the 191 disk. See Figure 7 on page 8 to obtain the minidisk requirements.
- **d** Add the MDISK statements for any other **P684137A** minidisks for which you are not using SFS directories. See Figure 7 on page 8 to obtain the minidisk requirements.
- **e** Determine the number of 4k blocks that are required for SFS directories. If you want to use all of the possible SFS directories, the total number of 4k blocks needed is 5100. If you do not want to use all of the SFS directories, refer to the 5684137A PLANINFO file or Figure 7 on page 8 and add up all of the 4k blocks for the SFS directories you want to use. This will give you the total number of 4k

blocks that will be needed to install VM Batch Facility V2.2. This information will be used when enrolling **P684137A** in the VMSYS: filepool.

f Enroll user ID **P684137A** in the VMSYS: filepool. This must be done from a user ID that is an administrator for the VMSYS: filepool.

enroll user p684137a vmsys: (blocks *blocks*

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

g Determine if there are enough blocks available in the filepool to install VM Batch Facility V2.2.

query filepool status vmsys:

Near the end of the output from this command is a list of minidisks in the filepool and the number of free blocks. If the number of free blocks is smaller than the total 4k blocks needed to install VM Batch Facility V2.2 you will need to add space to the filepool. See *VM/ESA SFS and CRR Planning, Administration, and Operation* for the procedure to add space to a filepool.

5 Add the MDISK statements to the directory entries for the **BATCH**, **BATCH1**, **BATCH2**, **TBATCH**, **TBATCH1**, and **TBATCH2** user IDs. Use Figure 7 on page 8 to obtain the minidisk requirements.

6 Add the directory entries to the user directory.

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

8 Ensure enough free blocks exist on **MAINT**'s 19D and 19E disks.

Before you install VM Batch Facility V2.2 you should ensure that there is enough free space on the **MAINT** 19D and 19E disks. The space requirements are:

- **19D**: 150 blocks, using a block size of 4096 bytes.
- **19E**: 450 blocks, using a block size of 4096 bytes.

6.1.3 Install VM Batch Facility V2.2 Using the VMFINS EXEC

1 Logon to the installation user ID **P684137A**.

2 If you are installing with SFS:

a create the necessary subdirectories listed in the 5684137A PLANINFO file.

set filepool vmsys:
create directory *dirid*

dirid is the name of the directory you are creating.

For example:
CREATE DIRECTORY .BATCH.LOCALSAM

For further information on the CREATE DIRECTORY command refer to *VM/ESA CMS Command Reference*

b Give **MAINT** access to the HELP files.

grant auth vmsys:p684137a.batch.help to maint (read newread

3 Format the user ID's minidisks.

At this time you should format the following minidisk if they have not previously been formatted. You may find it handy to check them off as you format them:

- □ 196
- □ 296
- □ 29E

You should also format all of the following addresses that have been defined as minidisks (not SFS directories) and have not previously been formatted:

- □ 191
- □ 2B2
- □ 2C2
- □ 2D2
- □ 2A6
- □ 2A2
- □ 29D
- □ 22D

Sample VM/ESA 2.1 Console Output

```
format 196 a
DMSFOR603R FORMAT will erase all files on disk A(191).  Do you wish to continue?
Enter 1 (YES) or 0 (NO).
1
DMSFOR605R Enter disk label:
P68196
DMSFOR733I Formatting disk A
DMSFOR732I 1 cylinders formatted on A(191)

format 296 b
⋮
```

End of Sample VM/ESA 2.1 Console Output

4 Create a PROFILE EXEC on the 191 disk.

```
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 the first access should be for minidisk **EE5**.

5 Re-IPL CMS to execute the profile to access **MAINT**'s minidisks.

```
ipl cms
```

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

```
link maint 51d 51d mr
access 51d d
```

Note: If installing on VM/ESA Release 1.0 370 Feature link to **SESELPS**'s **51D** disk.

7 Have the VM Batch Facility V2.2 installation tape mounted and attached to **P684137A** at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.

8 Install VM Batch Facility V2.2.

```
vmfins install ppf 5684137A {batchins|batchsfsins} (nomemo nolink
```

Use **batchins** if installing to minidisks or **batchsfsins** if installing to SFS.

The NOLINK option indicates that you do not want VMFINS to link to the appropriate minidisks, only access them if not accessed. These are the minidisks defined in the :MDA section of the PPF file.

Sample VM/ESA 2.1 Console Output

```
VMFINS2760I VMFINS processing started
VMFREQ2805I Product 5684137A component BATCHINS passed requisite checking
Do you want to create an override for 5684137A BATCHINS (prodid 5684137A)?
Enter 0 (No), 1 (Yes) or 2 (Exit)
```

0

Enter **0** to bypass creating an override.

Enter **1** to create an override to change the default installation user ID, change the name of the PPF, and/or change the minidisk/directory definitions.

Enter **2** to exit the VMFINS EXEC.

```
VMFINT2760I VMFINST processing started
VMFLDP2706I 5684137A BATCHINS (prodid 5684137A) 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  296   SES296
VMFUTL2205I BUILD2    J      R/W  29D   SES29D
VMFUTL2205I BUILD3    K      R/W  29E   SES29E
VMFUTL2205I BUILD4    L      R/W  22D   SES22D
VMFUTL2205I BASE1     M      R/W  2B2   SES2B2
VMFUTL2205I --------  A      R/W  191   SES191
VMFUTL2205I --------  D      R/W  51D   SES51D
VMFUTL2205I --------  S      R/O  190   CMS21
VMFUTL2205I --------  Y/S    R/O  19E   YDISK
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS TAPE 9300
VMFREC1851I (1 of 10) VMFRCAXL processing AXLIST
⋮

VMFREC2760I VMFREC processing completed successfully
VMFINT2760I VMFINST processing completed successfully
VMFINS2760I VMFINS processing completed successfully
```

End of Sample VM/ESA 2.1 Console Output

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

vmfview install

6.1.4 Update Build Status Table for VM Batch Facility V2.2

1 Update the VM SYSBLDS software inventory file for VM Batch Facility V2.2.

vmfins build ppf 5684137A {batchins|batchsfsins} (serviced nolink

Use **batchins** if installing to minidisks or **batchsfsins** if installing to SFS.

The SERVICED option will build any parts that could not be shipped as prebuilt on the installation tape.

Sample VM/ESA 2.1 Console Output

```
VMFINS2760I VMFINS processing started
VMFREQ2805I Product 5684137A component BATCHINS passed requisite checking
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  296   SES296
VMFUTL2205I BUILD2    J      R/W  29D   SES29D
VMFUTL2205I BUILD3    K      R/W  29E   SES29E
VMFUTL2205I BUILD4    L      R/W  22D   SES22D
VMFUTL2205I BASE1     M      R/W  2B2   SES2B2
VMFUTL2205I --------  A      R/W  191   SES191
VMFUTL2205I --------  B      R/W  5E5   SES5E5
VMFUTL2205I --------  D      R/W  51D   SES51D
VMFUTL2205I --------  S      R/O  190   CMSDSK
VMFUTL2205I --------  Y/S    R/O  19E   YDISK

VMFSET2760I VMFSETUP processing completed successfully
VMFBLD2760I VMFBLD processing started
VMFBLD1851I Reading build lists
VMFBLD2182I Identifying new build requirements
```

```
VMFBLD2182I No new build requirements identified
VMFBLD2179I There are no build requirements matching your request at this time.
            No objects will be built
VMFBLD2180I There are 0 build requirements remaining
VMFBLD2760I VMFBLD processing completed successfully
VMFINB2173I No verification exec found for this product
```

End of Sample VM/ESA 2.1 Console Output

6.1.5 Verify the Installation

In this section, the VM Batch Facility V2.2 test environment is set up using the **TBATCH**, **TBATCH1**, and **TBATCH2** user IDs. The installation of VM Batch Facility V2.2 code is verified in the test environment before it is moved to the production system.

1 Establish access authorities.

Issue RACF PERMITs for both the test and production Facilities according to the section "Required RACF PERMITS" in *VM Batch Facility Installation, Customization, and Administration*.

See Appendix D, "Setting up the Proper RACF Access Authorities" on page 56 for an explanation of the RACF commands required.

2 Logon to the test monitor (**TBATCH**) and format its disks:

- □ 191
- □ 193
- □ 194
- □ 195
- □ 199

Sample VM/ESA 2.1 Console Output

```
format 191 a
DMSFOR603R FORMAT will erase all files on disk A(191).  Do you wish to continue?
Enter 1 (YES) or 0 (NO).
1
DMSFOR605R Enter disk label:
TBA191
DMSFOR733I Formatting disk A
DMSFOR732I 1 cylinders formatted on A(191)

format 193 f
⋮
```

End of Sample VM/ESA 2.1 Console Output

3 Create a PROFILE EXEC on the 191 disk.

```
xedit profile exec a
====> input /* */
====> input 'exec runbatch'
====> file
```

4 Link and format the test task machines' 191 disks.

Sample VM/ESA 2.1 Console Output

```
link TBATCH1 191 291 mr
format 291 q
DMSFOR603R FORMAT will erase all files on disk Q(291).  Do you wish to continue?
Enter 1 (YES) or 0 (NO).
1
DMSFOR605R Enter disk label:
TBA191
DMSFOR733I Formatting disk Q
DMSFOR732I 2 cylinders formatted on Q(291)
release q (detach

link TBATCH2 191 291 mr
format 291 q
⋮
```

End of Sample VM/ESA 2.1 Console Output

5 Copy the CONTROL FILE and installation exits to the test monitor's G-disk (199).

```
access 192 d
access 199 g
copyfile control sample d = file g (olddate
copyfile dgrido execsamp d = exec g (olddate
copyfile dgrumsg execsamp d = exec g (olddate
copyfile dgruac execsamp d = exec g (olddate
copyfile dgrucd execsamp d = exec g (olddate
copyfile dgrecur execsamp d = exec g (olddate
copyfile dgrujb execsamp d = exec g (olddate
```

6 Customize the CONTROL FILE.

a XEDIT the CONTROL FILE on the G-disk and find the TASK keywords that define the **TBATCH1** and **TBATCH2** task machines:

```
TASK TBATCH1  XXXXXXXX XXXXXXXX  .AB  0000 2400
TASK TBATCH2  XXXXXXXX XXXXXXXX  .AB  0000 2400
```

Change these statements according to the requirements of your system. Be sure to enter the passwords in upper case. The logon password you enter must match the password recorded by RACF and coded in the CP directory of the particular task machine. If your system:

- **requires** passwords for autologging user IDs:
  1) Change the first XXXXXXXX in each statement to the logon password for the particular task machine.
  2) Change the second XXXXXXXX in each statement to the write password of the 191 disk for the particular task machine. If RACF allows the monitor UPDATE access to the task machine's 191 disk, enter *NOPASS* for the write password.

  The following example shows a TASK statement for **TBATCH1** with a logon password of *VMBATCH* on a system that requires passwords for autologging user IDs. The monitor machine has been given RACF UPDATE access to the task machine's 191 disk.

  ```
  TASK TBATCH1  VMBATCH  *NOPASS*  .AB  0000 2400
  ```

- **does not require** passwords for autologging user IDs:
  1) Change the first XXXXXXXX in each statement to *NOPASS*.
  2) Change the second XXXXXXXX in each statement to the write password of the 191 disk for the particular task machine. If RACF allows the monitor UPDATE access to the task machine's 191 disk, enter *NOPASS* for the write password.
  3) Add the logon password to the end of the TASK statement.

  The following example shows a TASK statement for **TBATCH1** with a logon password of *VMBATCH* on a system that does not require passwords for autologging user IDs. The monitor machine has been given RACF UPDATE access to the task machine's 191 disk.

  ```
  TASK TBATCH1  *NOPASS* *NOPASS*  .AB  0000 2400  VMBATCH
  ```

b Tailor the Facility to your requirements. Refer to the section “Tailoring the VM Batch Facility” in *VM Batch Facility Installation, Customization, and Administration*.

7 Start the test monitor.

runbatch — This will start the monitor program.

#cp disc — This will disconnect the virtual machine. Enter it when you are prompted to do so.

8 Logon to the installation user ID **P684137A** and access the test code.

```
access 29e e
access 29d f
```

9 Verify that VM Batch Facility V2.2 is functioning correctly.

```
batch address tbatch *
batch level
```

These commands address the **TBATCH** monitor machine and submit a job called DGRLEVEL. When DGRLEVEL completes the console from the task machine in which it ran will be in your virtual reader.

Sample Message Output

```
DGRBAT555I BATCH Version 2.2, Service Level 000.
DGREXE120I YOU ARE NOW ADDRESSING MONITOR 'TBATCH' AT NODE 'yournode'
DGREXE555I DGRBATCH Version 2.2, Service Level 000.
DGRIPW555I DGRIPW Version 2.2, Service Level 000.
DGRUVM555I DGRUVM Version 2.2, Service Level 000.
DGRLAF555I DGRLAF Version 2.2, Service Level 000.
DGRCHJ555I DGRCHJO Version 2.2, Service Level 000.
DGRPAS555I DGRPASS Version 2.2, Service Level 000.
DGRSUB555I DGRSUBM Version 2.2, Service Level 000.
DGRUME555I DGRUME Version 2.2, Service Level 000.
DGRMAI555I DGRMAIN Version 2.2, Service Level 000.
DGRRBT555I RUNBATCH Version 2.2, Service Level 000.
DGREXE119I JOB 'DGRLEVEL' SUBMITTED TO 'TBATCH' AT 'yournode'
Ready; T=0.51/0.64 19:13:45
Job DGRLEVEL has been received
Job DGRLEVEL has started
RDR FILE 0063 SENT FROM P684137A CON WAS 0108 RECS 0050 CPY
Job DGRLEVEL has ended; RC = 0
```

End of Sample Message Output

Sample Task Machine Console

```
VM Batch Facility components as seen by task machine TBATCH1:

DGRLVL555I DGRLEVEL Version 2.2, Service Level 000.
DGREXE555I DGRBATCH Version 2.2, Service Level 000.
DGRLAF555I DGRLAF Version 2.2, Service Level 000.
DGRRUN555I DGRRUN Version 2.2, Service Level 000.
DGRTAS555I DGRTASK Version 2.2, Service Level 000.
DGRTSK555I DGRTSK Version 2.2, Service Level 000.
DGRUVM555I DGRUVM Version 2.2, Service Level 000.
DGRUME555I DGRUME Version 2.2, Service Level 000.
```

End of Sample Task Machine Console

10 Stop the test monitor machine.

batch stop

6.2 Migrate from a Previous Release of the Product

This section explains how to migrate from a previous release of VM Batch Facility Also refer to the "Migration Considerations" section in *VM Batch Facility Installation, Customization, and Administration*.

If you are not migrating from a previous release, skip directly to 6.3, "Place the New Product into Production" on page 30.

1 Stop your current production monitor machine.

batch address *monitor* *****
batch stop

These commands must be issued from an administrator user ID for your current production monitor.

2 Back up any of the monitor's disks that you wish to save.

3 Update the **BATCH** directory entry by adding a link statement. This link will ensure access to VM Batch Facility V2.2 code. The link statement is:

LINK P684137A 196 192 RR

Review the PLANINFO file to see if any other directory changes need to be made to make the migration of **BATCH** complete.

4. Logon to **BATCH**. Logoff and then logon again in order for the new changes to the directory entry for **BATCH** to take effect.

5. XEDIT your CONTROL FILE. on the 199 disk.

   a. Add user ID **P684137A** as an administrator.

   b. Refer to section “Migrating Considerations,” subsection “Monitor CONTROL FILE changes” in the *VM Batch Facility Installation, Customization, and Administration* manual for specific changes needed to the CONTROL FILE.

6. Migrate the monitor installation exits.

   a. Rename your current installation exits.

rename dgrido exec *fm* **= execold =**
rename dgrumsg exec *fm* **= execold =**
rename dgruac exec *fm* **= execold =**
rename dgrucd exec *fm* **= execold =**
rename dgrujb exec *fm* **= execold =**

fm is the filemode of the installation exit. Earlier releases of VM Batch Facility did not require the monitor installation exits to be on the monitor's G-disk. Your current copies of the monitor installation exits are probably on the monitor's A-disk.

   b. Copy the new installation exits to your production monitor's 199 disk, regardless of whether your existing exits have been customized or not.

```
access 192 d
access 199 g
copyfile dgrido execsamp d = exec g (olddate
copyfile dgrumsg execsamp d = exec g (olddate
copyfile dgruac execsamp d = exec g (olddate
copyfile dgrucd execsamp d = exec g (olddate
copyfile dgrecur execsamp d = exec g (olddate
copyfile dgrujb execsamp d = exec g (olddate
```

   c. Migrate your exit modifications.

      1. Review the modifications you made to your current exits. Refer to section “Migrating Exits” in *VM Batch Facility Installation, Customization, and Administration* for specific changes made to the VM Batch Facility V2.2 exits.

      2. Migrate your modifications to the new exits, or rework your existing exits to include the new changes. If you choose to

modify an existing exit, be sure to include the prolog and the PARSE ARG statement from the new version.

7 Perform a cold start of the monitor machine.

It will be necessary to cold start the monitor, since changes to the format of the files on the monitor's 194 disk make the files incompatible between releases. Cold starting is performed by erasing four files from the disk.

```
access 194 c
erase batch users c
erase batch jobs c
erase batch system c
erase batch machines c
```

Caution: Cold starting the VM Batch Facility makes it impossible to start any queued jobs. Therefore, any queued jobs should be erased from the monitor machine's 193 disk, and the monitor's punch should be purged at this time.

Job owners must resubmit the erased jobs in order to have them run.

8 Continue with the next section, "Place the New Product into Production" up to and including step 9 on page 31. After step 9, skip to step 15 on page 34.

6.3 Place the New Product into Production

1 Logon to the **P684137A** user ID if it is not already logged on.

2 Place the VM Batch Facility V2.2 monitor machine code into production.

```
access 296 e
access 196 f
vmfcopy * * e = = f (prod 5684137a%batch olddate replace
```

296 is the minidisk that the new code was loaded to during the installation step.

196 is the production build disk.

3 Logon to **MAINT**.

4 If installing on VM/ESA Release 1.0 370 Feature, access the VMSES/E code.

```
link seselps ee5 ee5 rr
access ee5 b
```

5 Put the general user code into production.

```
link * 19e 19e mr
access 19e f
link P684137A 29e 29e rr
access 29e e
vmfcopy * * e = = f (prod 5684137a%batch olddate replace
```

6 Re-save the CMS saved system. This will re-save CMS to put the 19E disk back into shared status.

Refer to “Placing Components into Production” in the *VM/ESA Service Guide.* This is Step 11 for VM/ESA Release 1.0 370 Feature, or step 12 for VM/ESA Release 2.0 and above.

7 Put the HELP code into production.

```
link P684137A 29D 29D rr
access 29D e
access 19D f
vmfcopy * * e = = f (prod 5684137a%batch olddate replace
```

8 Re-save the HELP saved segment.

Refer to “Placing Components into Production” in the *VM/ESA Service Guide.* This is Step 11 for VM/ESA Release 1.0 370 Feature, or step 12 for VM/ESA Release 2.0 and above.

9 Logon to the production monitor (**BATCH**).

If you are migrating from a previous release of VM Batch Facility skip to step 15 on page 34.

10 Format the production monitor's disks:

- □ 191
- □ 193
- □ 194
- □ 195
- □ 199

Sample VM/ESA 2.1 Console Output

```
format 191 a
DMSFOR603R FORMAT will erase all files on disk A(191).  Do you wish to continue?
Enter 1 (YES) or 0 (NO).
1
DMSFOR605R Enter disk label:
BAT191
DMSFOR733I Formatting disk A
DMSFOR732I 1 cylinders formatted on A(191)

format 193 f
⋮
```

End of Sample VM/ESA 2.1 Console Output

11 Create a PROFILE EXEC on the 191 disk.

```
xedit profile exec a
====> input /* */
====> input 'exec runbatch'
====> file
```

12 Link and format the production task machines' 191 disks.

Sample VM/ESA 2.1 Console Output

```
link BATCH1 191 291 mr
format 291 q
DMSFOR603R FORMAT will erase all files on disk Q(291).  Do you wish to continue?
Enter 1 (YES) or 0 (NO).
1
DMSFOR605R Enter disk label:
BAT191
DMSFOR733I Formatting disk Q
DMSFOR732I 2 cylinders formatted on Q(291)
release q (detach

link BATCH2 191 291 mr
format 291 q
⋮
```

End of Sample VM/ESA 2.1 Console Output

13 Copy the CONTROL FILE and installation exits to the production monitor's G-disk (199).

```
access 192 d
access 199 g
copyfile control sample d = file g (olddate
copyfile dgrido execsamp d = exec g (olddate
copyfile dgrumsg execsamp d = exec g (olddate
copyfile dgruac execsamp d = exec g (olddate
copyfile dgrucd execsamp d = exec g (olddate
copyfile dgrecur execsamp d = exec g (olddate
copyfile dgrujb execsamp d = exec g (olddate
```

14 Customize the CONTROL FILE.

XEDIT the CONTROL FILE on the G-disk (199) and make the following changes:

a Change the TASK statements to reflect the user IDs and passwords of the production task machines according to the requirements of your system. Be sure to enter the passwords in upper case. The logon password you enter must match the password recorded by RACF and coded in the CP directory of the particular task machine. If your system:

- **requires** passwords for autologging user IDs:
  1) The first password should be the logon password for the particular task machine.
  2) The second password should be the write password of the 191 disk for the particular task machine. If RACF allows the monitor UPDATE access to the task machine 191 disk, enter *NOPASS* for the write password.

The following example shows a TASK statement for **BATCH1** with a logon password of *VMBATCH* on a system that requires passwords for autologging user IDs. The monitor machine has been given RACF UPDATE access to the task machine's 191 disk.

```
1          TASK BATCH1   VMBATCH  *NOPASS*  .AB  0000 2400 N
```

- **does not require** passwords for autologging user IDs:
  1) The first password should be *NOPASS*.
  2) The second password should be the write password of the 191 disk for the particular task machine. If RACF allows the monitor

UPDATE access to the task machine 191 disk, enter *NOPASS* for the write password.

3) The third password (at the end of the TASK statement) should be the logon password for the particular task machine.

The following example shows a TASK statement for **BATCH1** with a logon password of *VMBATCH* on a system that does not require passwords for autologging user IDs. The monitor machine has been given RACF UPDATE access to the task machine's 191 disk.

```
1          TASK BATCH1   *NOPASS* *NOPASS*  .AB  0000 2400 N VMBATCH
```

For further information refer to the description of the TASK statement in the section "Customizing the VM Batch Facility" in *VM Batch Facility Installation, Customization, and Administration*.

b Find the CONSOLE keyword at the end of the CONTROL FILE and change the user ID from **TBATCH** to **BATCH** or a different default console message receiver. For further information refer to the description of the CONSOLE statement in the section "Customizing the VM Batch Facility" in *VM Batch Facility Installation, Customization, and Administration*.

c Tailor the Facility to your requirements. Refer to the section "Tailoring the VM Batch Facility" in *VM Batch Facility Installation, Customization, and Administration*.

15 Start the production monitor.

runbatch	This will start the monitor program.
#cp disc	This will disconnect the virtual machine. Enter it when you are prompted to do so.

16 If you wish to have VM Batch Facility V2.2 started every time the VM/ESA system is IPLed then you should add an entry to the profile of your autolog machine to autolog the production monitor user ID.

VM Batch Facility V2.2 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 VM Batch Facility V2.2. VMSES/E is used to install service for VM Batch Facility V2.2.

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

- *VMSES/E Introduction and Reference* (SC24-5444)
- *VMSES/E 370 Feature Introduction and Reference for Licensed Programs* (SC24-5659)

This manual also contains the command syntax for the VMSES/E commands listed in the procedure.

7.1 VMSES/E Service Process Overview

The following is a brief description of the main steps in servicing VM Batch Facility V2.2 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 must be entered into the software inventory to allow VMSES/E to track the changes and build them into the system. See Chapter 7 in the *VM/ESA Service Guide* (SC24-5527) for this procedure.

- Building New Levels

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

- Placing the New Service into Production

  Once the service is satisfactorily tested it should be put into production by copying the new service to the production disks.

7.2 Servicing VM Batch Facility V2.2

7.2.1 Prepare to Receive Service

1. Logon to VM Batch Facility V2.2 service user ID **P684137A**

2. Establish 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**'s **51D** disk.

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

3. Have the VM Batch Facility V2.2 CORrective service tape mounted and attached to **P684137A** at virtual address 181.

4. Establish the correct minidisk access order.

vmfsetup 5684137A {batch|batchsfs}

Use **batch** if service uses minidisks or **batchsfsins** if service uses SFS.

5684137A is the PPF that was shipped with the product. If you have your own PPF override you should substitute your PPF name for 5684137A .

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

vmfmrdsk 5684137A {batch|batchsfs} apply

Use **batch** if service uses minidisks or **batchsfs** if service uses SFS.

This command clears the alternate APPLY disk.

6. Review the merge message log ($VMFMRD $MSGLOG). If necessary, correct any problems before going on. For information about handling specific 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 electronic service from Service Link see Appendix A, “Receiving Service for VMSES Envelopes,” in the *VM/ESA Service Guide*.

1 Receive the service.

vmfrec ppf 5684137A {batch|batchsfs}

Use **batch** if service uses minidisks or **batchsfs** if service uses SFS.

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 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 5684137A {batch|batchsfs}

Use **batch** if service uses minidisks or **batchsfs** if service uses SFS.

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 messages, see *VM/ESA System Messages and Codes,* or use on-line HELP.

vmfview apply

7.2.4 Update the New Status Table

1 Update the Build Status Table with serviced parts.

vmfbld ppf 5684137A {batch|batchsfs} (status

Use **batch** if service uses minidisks or **batchsfs** if service uses SFS.

This command updates the Build Status Table.

Note

If the 5684137A $PPF file has been serviced you will get the following prompt:

```
VMFBLD2185R The following source product parameter files have been
serviced:
VMFBLD2185R 5684137A $PPF
VMFBLD2185R When source product parameter files are serviced, all
            product parameter files built from them must be recompiled
            using VMFPPF before VMFBLD can be run.
VMFBLD2185R Enter zero (0) to have the serviced source product
            parameter files built to you A-disk and exit VMFBLD so
            you can recompile your product parameter files with VMFPPF
VMFBLD2185R Enter one (1) to continue only if you have already
            recompiled your product parameter files with VMFPPF
```

0

Enter **0** and complete the following steps before you continue.

```
VMFBLD2188I Building 5684137A $PPF on 191 (A) from level $PFnnnnn
```

vmfppf 5684137A {batch|batchsfs}

Use **batch** if service uses minidisks or **batchsfs** if service uses SFS.

copyfile 5684137A $ppf a = = d (olddate replace
erase 5684137A $ppf a

vmfbld ppf 5684137A {batch|batchsfs} (status

Re-issue VMFBLD to complete updating the build status table.

Use **batch** if service uses minidisks or **batchsfs** if service uses SFS.

1

When you receive the prompt that was previously displayed, enter **1** to continue.

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 VM Batch Facility V2.2 serviced parts.

vmfbld ppf 5684137A {batch|batchsfs} (serviced

Use **batch** if service uses minidisks or **batchsfs** if service uses SFS.

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

vmfview build

7.2.6 Apply Service to your CONTROL FILE and Installation Exits

1 Check the 296 and 29E disks for the presence of any of the following files:

- **296 disk:**
  - CONTROL SAMPLE
  - DGRIDO EXECSAMP
  - DGRUMSG EXECSAMP
  - DGRUAC EXECSAMP
  - DGRUCD EXECSAMP
  - DGRECUR EXECSAMP
  - DGRUJB EXECSAMP
- **29E disk:**
  - DGROOLY EXECSAMP
  - DGREVR EXECSAMP

If none of these files are present, skip to 7.2.7, "Verify the New Service" on page 42 .

2 Apply service to your CONTROL FILE.

If there is a CONTROL SAMPLE file on the 296 disk, service has been applied to the CONTROL FILE. If there is no CONTROL SAMPLE file on the 296 disk, continue with step 3.

a Link to the test monitor's 199 disk in write mode.

```
link tbatch 199 299 mr
access 299 g
```

b Copy the CONTROL SAMPLE file to the test monitor's 199 disk.

```
access 296 f
copyfile control sample f = = g (olddate replace
```

c XEDIT the CONTROL SAMPLE file on the 199 disk.

Locate the Change History section at the top of the file. Compare the entries with the Change History section at the top of your CONTROL FILE to see what service was added to the CONTROL SAMPLE file and how it affects your CONTROL FILE. Modify your CONTROL FILE accordingly. Be sure to update your CONTROL FILE's Change History section appropriately.

3 Apply service to your monitor installation exits.

The presence of an EXECSAMP file on the 296 disk indicates that the corresponding monitor installation exit has been serviced. Complete the following steps for each EXECSAMP file on the disk. If there are no EXECSAMP files on the 296 disk, continue with step 4.

a If the EXECSAMP file is for an exit that you **have not** previously modified:

1 Link to the test monitor's 199 disk in write mode.

```
link tbatch 199 299 mr
access 299 g
```

2 Copy the EXECSAMP file to the test monitor's 199 disk, replacing the current copy.

access 296 f *exitname* is the name of the serviced exit.
copyfile *exitname* **execsamp f = exec g (olddate replace**

b If the EXECSAMP file is for an exit that you **have** previously modified:

1 Link to the test monitor's 199 disk in write mode.

link tbatch 199 299 mr
access 299 g

2 Copy the EXECSAMP file to the test monitor's 199 disk.

access 296 f *exitname* is the name of the serviced exit.
copyfile *exitname* **execsamp f = = g (olddate replace**

3 XEDIT the EXECSAMP file on the 199 disk.

a Locate the Change History section at the bottom of the prolog.

b Compare the entries to the Change History section in your existing copy of the exit on the 199 disk to see what service has been added to the EXECSAMP file.

c Scan the right margin of the EXECSAMP file, looking for the APAR number associated with the new addition to the Change History section. An APAR number in the right margin indicates that line has been modified or added by the APAR.

d Determine how the service to the EXECSAMP file affects your copy of the exit, and make your changes accordingly.

e You should include the PARSE ARG statement and prolog from the EXECSAMP file in your copy of the exit, and update the Change History section with the new addition.

4 Apply service to your user and task interface exits.

The presence of an EXECSAMP file on the 29E disk indicates that the corresponding user or task interface exit has been serviced. Complete the following steps for each EXECSAMP file on the disk. If there are no EXECSAMP files on the 29E disk, continue with 7.2.7, “Verify the New Service” on page 42.

a If the EXECSAMP file is for an exit that you **have not** previously modified, replace the existing copy. .

access 29e e *exitname* is the name of the serviced exit.
rename *exitname* **execsamp e = exec =**

b If the EXECSAMP file is for an exit that you **have** previously modified:

1 XEDIT the EXECSAMP file on the 29E disk.

a Locate the Change History section at the bottom of the prolog.

b Compare the entries to the Change History section in your existing copy of the exit on the 29E disk to see what service has been added to the EXECSAMP file.

c Scan the right margin of the EXECSAMP file, looking for the APAR number associated with the new addition to the Change History section. An APAR number in the right margin indicates that line has been modified or added by the APAR.

d Determine how the service to the EXECSAMP file affects your copy of the exit, and make your changes accordingly.

e You should include the PARSE ARG statement and prolog from the EXECSAMP file in your copy of the exit, and update the Change History section with the new addition.

7.2.7 Verify the New Service

1 Start the test monitor (**TBATCH**).

autolog tbatch	This will autolog the test monitor machine and the PROFILE EXEC will invoke the monitor program. This command must be issued from a user ID with CP privilege class A or B.
password	If you are prompted for a password, enter the logon password for **TBATCH**. Depending on system settings, password may be required on the autolog command line. ('**autolog tbatch TBATCH**.

2 Access the test code.

```
access 29e b
access 29d c
```

3 Verify that VM Batch Facility V2.2 is functioning correctly.

batch address tbatch *
batch level

These commands address the **TBATCH** monitor machine and submit a job called DGRLEVEL. When DGRLEVEL completes the console from the task machine in which it ran will be in your virtual reader.

Note: The actual service level reported (xxx in the sample output) will vary according to the service applied and will not necessarily be the same for all components.

Sample Message output

```
DGRBAT555I BATCH Version 2.2, Service Level xxx.
DGREXE120I YOU ARE NOW ADDRESSING MONITOR 'TBATCH' AT NODE 'yournode'
DGREXE555I DGRBATCH Version 2.2, Service Level xxx.
DGRIPW555I DGRIPW Version 2.2, Service Level xxx.
DGRUVM555I DGRUVM Version 2.2, Service Level xxx.
DGRLAF555I DGRLAF Version 2.2, Service Level xxx.
DGRCHJ555I DGRCHJO Version 2.2, Service Level xxx.
DGRPAS555I DGRPASS Version 2.2, Service Level xxx.
DGRSUB555I DGRSUBM Version 2.2, Service Level xxx.
DGRUME555I DGRUME Version 2.2, Service Level xxx.
DGRMAI555I DGRMAIN Version 2.2, Service Level xxx.
DGRRBT555I RUNBATCH Version 2.2, Service Level xxx.
DGREXE119I JOB 'DGRLEVEL' SUBMITTED TO 'TBATCH' AT 'yournode'
Ready; T=0.51/0.64 19:13:45
Job DGRLEVEL has been received
Job DGRLEVEL has started
RDR FILE 0063 SENT FROM youruser CON WAS 0108 RECS 0050 CPY
Job DGRLEVEL has ended; RC = 0
```

End of Sample Message output

Sample Task Machine Console Output.

```
VM Batch Facility components as seen by task machine TBATCH1:

DGRLVL555I DGRLEVEL Version 2.2, Service Level xxx.
DGREXE555I DGRBATCH Version 2.2, Service Level xxx.
DGRLAF555I DGRLAF Version 2.2, Service Level xxx.
DGRRUN555I DGRRUN Version 2.2, Service Level xxx.
DGRTAS555I DGRTASK Version 2.2, Service Level xxx.
DGRTSK555I DGRTSK Version 2.2, Service Level xxx.
DGRUVM555I DGRUVM Version 2.2, Service Level xxx.
DGRUME555I DGRUME Version 2.2, Service Level xxx.
```

End of Sample Task Machine Console Output.

4 Submit other test jobs, as necessary, to verify that VM Batch Facility V2.2 is functioning correctly. Remember to address the **TBATCH** monitor machine when submitting the test job.

5 Stop the test monitor machine.

```
batch stop
```

7.3 Place the New Service into Production

1 Shut down the production monitor machine (**BATCH**).

```
batch address batch *
batch stop
```

These commands must be issued from an administrator user ID.

2 Place the VM Batch Facility V2.2 monitor machine code into production.

```
access 296 e
access 196 f
vmfcopy * * e = = f (prod 5684137a%batch olddate replace
```

296 is the minidisk that the new code was loaded to during service application.

196 is the production build disk.

3 Logon to **MAINT** and access the serviced general user code.

```
link * 19e 19e mr
access 19e f
link P684137A 29E 29E rr
access 29e e
vmfcopy * * e = = f (prod 5684137a%batch olddate replace
```

4 Re-save the CMS saved system. This will re-save CMS to put the 19E disk back into shared status.

Refer to “Placing Components into Production” in the *VM/ESA Service Guide.* This is Step 11 for VM/ESA Release 1.0 370 Feature, or step 12 for VM/ESA Release 2.0 and above.

5 Put the HELP code into production.

```
link P684137A 29D 29D rr
access 29D e
access 19D f
vmfcopy * * e = = f (prod 5684137a%batch olddate replace
```

6 Re-save the HELP saved segment.

Refer to “Placing Components into Production” in the *VM/ESA Service Guide.* This is Step 11 for VM/ESA Release 1.0 370 Feature, or step 12 for VM/ESA Release 2.0 and above.

7 Make any service related changes to the CONTROL FILE or monitor exits.

a If you made changes to the CONTROL FILE on **TBATCH**'s 199 disk due to service applied to the CONTROL SAMPLE file, make the appropriate changes to the production monitor machine's CONTROL FILE at this time.

b If you made changes to any of the monitor exits on **TBATCH**'s 199 disk due to service applied to the EXECSAMP files, copy the modified exits to **BATCH**'s 199 disk at this time.

8 Delete any EXECSAMP files from the 29E and 296 disks. In addition, delete the CONTROL SAMPLE file from the 296 disk.

These files are erased so that their possible future presence on the disks will indicate that they have received new service.

access 29e e **vmferase file * execsamp e**	This erases all EXECSAMP files and updates the partcat on 29E.
access 296 f **vmferase file * execsamp f**	This erases all EXECSAMP files and updates the partcat on 296.
vmferase file control sample f	This erases the CONTROL SAMPLE file and updates the partcat on 296.

9 Start the monitor machine (**BATCH**).

autolog batch	This will autolog the monitor machine and the PROFILE EXEC will invoke the monitor program. This command must be issued from a user ID with CP privilege class A or B.

password	If you are prompted for a password, enter the logon password for **BATCH**. Depending on system settings, password may be required on the autolog command line. ('**autolog batch BATCH**.

You have now finished servicing VM Batch Facility V2.2.

Appendix A. Modifying Installation Exits and the CONTROL FILE

A.1 Modifying Monitor Exits and the CONTROL FILE

The following instructions are for modifying the monitor exits and the CONTROL FILE. The monitor exits are:

- DGRIDO EXEC
- DGRUMSG EXEC
- DGRUAC EXEC
- DGRUCD EXEC
- DGRECUR EXEC
- DGRUJB EXEC

It is advisable to update the test monitor files and verify the modifications before you update the files on the production monitor(s).

1 Logon to an administrator user ID for the monitor you wish to modify.

2 Access the monitor's 199 disk in write mode.

link *monitor* **199 199 mr**
access 199 *fm*

monitor is the user ID of the monitor you wish to modify.

fm is any free filemode.

3 Use XEDIT to make the required changes to the file(s) on the 199 disk.

4 Ensure that you are addressing the correct monitor.

batch address *monitor* ***

monitor is the user ID of the monitor that uses the files you have modified.

5 If you modified any exits then reload them.

batch reload

This will cause the monitor to reload all of the exits.

6 If you modified the CONTROL FILE then reload it.

batch control set

This will cause the monitor to reload the CONTROL FILE.

You have now finished modifying the installation exits and CONTROL FILE.

A.2 Modifying Task and User Interface Exits

The following instructions are for modifying the task and user interface exits that reside on the Y-disk (19E). These exits are:

- DGROOLY EXEC
- DGREVR EXEC

1 Logon to **P684137A**.

2 Check the 29E disk contents.

If the 29E disk does not have DGROOLY EXEC and DGREVR EXEC files then you must copy the files from the sample files on the 2C2 disk..

```
access 2c2 e
access 29e f
vmfcopy dgrooly execsamp e = exec f (prod 5684137a%batch olddate
vmfcopy dgrevr execsamp e = exec f (prod 5684137a%batch olddate
```

3 Use XEDIT to make changes to the EXEC files on the 29E disk.

4 Test the exits.

You should start the test monitor and submit a job that will verify that the exits function as required. Remember to address the **TBATCH** monitor machine when submitting the test job.

autolog tbatch

This will autolog the test monitor machine and the PROFILE EXEC will invoke the monitor program.

This command must be issued from a user ID with CP privilege class A or B.

password — If you are prompted for a password, enter the logon password for **TBATCH**. Depending on system settings, password may be required on the autolog command line. ('**autolog tbatch** *password*')

A.2.1 Place the Updated Task and User Interface Exits into Production

1 Logon to **MAINT** and access the customized exits.

link P684137A 29E 29E rr
access 29E e
vmfcopy * * e = = *fm* (prod 5684137a%batch olddate replace

fm is the filemode of the 19E disk accessed in R/W mode.

2 Re-save the CMS saved system. This will re-save CMS to put the 19E disk back into shared status.

Refer to "Placing Components into Production" in the *VM/ESA Service Guide.* This is Step 11 for VM/ESA Release 1.0 370 Feature, or step 12 for VM/ESA Release 2.0 and above.

You have now finished modifying the task and user interface exits.

Appendix B. Listing of Sample CONTROL FILE

CONTROL FILE

```
*--------------------------------------------------------------------*
*                 VM BATCH FACILITY CONTROL FILE                     *
*--------------------------------------------------------------------*
* Change History                                                     *
*                                                                    *
*                                                                    *
*--------------------------------------------------------------------*

*--------------------------------------------------------------------*
*                          TASK MACHINES                             *
*--------------------------------------------------------------------*
TASK TBATCH1  XXXXXXXX XXXXXXXX  .AB  0000 2400
TASK TBATCH2  XXXXXXXX XXXXXXXX  .AB  0000 2400

*--------------------------------------------------------------------*
*                           AUTHORIZED USERS                         *
*--------------------------------------------------------------------*
  ADMIN P684137A
* ADMIN XXXXXXXX XXXXXXXX

*--------------------------------------------------------------------*
*                           CLASSES                                  *
*--------------------------------------------------------------------*

* This sample Class A :
*    - does not allow a storage override
*    - does not subject jobs to LLS
*    - stall values default
 CLASS CLASSID=A DEFCPU=1000 MAXCPU=2000 +
       DEFPRT=64 MAXPRT=1000 +
       DEFPUN=64 MAXPUN=1000 +
       DEFSTOR=2M +
       LLSDEF=LLS
```

```
* This sample Class B :
*    - allows unlimited CPU if requested
*    - allows storage values between 2M and 16M
*    - stall processing is suppressed
*    - has a restricted window
*    - does not subject jobs to LLS by default.
 CLASS CLASSID = B DEFCPU = 9999 MAXCPU = NONE +
       DEFPRT=64 MAXPRT=1000 +
       DEFPUN=64,MAXPUN=1000 +
       DEFSTOR=4M MINSTOR=2M MAXSTOR=16M +
       STALLWRN=* +
       SWINDOW=1700 EWINDOW=0800
*
 CLASS CLASSID=AUTOLOG

*-------------------------------------------------------------------*
*                          LLS ACTIVITY                             *
*-------------------------------------------------------------------*
*  LLS RESOURCE=CPU SCV=XXXX RCD=XXXX
*-------------------------------------------------------------------*
*                       CONTROL PARAMETERS                          *
*-------------------------------------------------------------------*
*
MAXIMUM-USERS         50
MAXIMUM-JOBS         500
*
DISPATCH-INTERVAL      4
CHECK-RUNNING-JOBS    10
MAXJOBS/USER:RUNNING   8
MAXJOBS/USER:RUNNING+QUEUED  32
MINIMUM-STALL-DELAY   60
MAXIMUM-STALL-WARNINGS 3
MAXIMUM-JOB-SIZE  100000
JOB-INIT-TIME/100000-RECS  4
ACCOUNT 0
CONSOLE TBATCH
*
```

End of CONTROL FILE

Appendix C. Changing Installation Defaults: Creating an Override

During the planning phase of the installation step you are given the opportunity to change the default installation environment using the Make Override Panel function. You may change the name of the $PPF file, the installation and service user ID, minidisk addresses or Shared File System directories. The Make Override Panel will create an override for the component name and PPF name that are used in the VMFINS command with the PLAN option.

You may be using the component name BATCHINS for a minidisk installation or BATCHSFSINS for an installation in Shared File System. Any changes you make to the installation component must also be made to the service component. The service component name will be used at a later time, for applying service to VM Batch Facility V2.2. The service component name for BATCHINS is BATCH. The service component partner for BATCHSFSINS is BATCHSFS.

To make changes to the default installation environment (e.g. user ID, minidisks, etc.) for a minidisk installation, you must invoke the VMFINS command as follows:

vmfins install ppf 5684137a batchins (plan nomemo

and type **1** at the prompt to indicate that you wish to change the default installation values.

The Make Override Panel will generate a new $PPF. In the example that follows, BATCH22 is used as the $PPF name. The Make Override Panel will automatically compile the new $PPF with a component BATCHINS. In BATCH22 $PPF we have changed the default installation user ID from **P684137A** to **LPMAINT.**

Our example $PPF was created by the Make Override Panel during planning.

BATCH22 $PPF file

```
************************************
* VM BATCH FACILITY 2.2.0          *
************************************
:OVERLST. BATCHINS
:BATCHINS. BATCHINS 5684137A
:DCL. REPLACE
&BATID7 USER TBATCH2
&DISK23 LINK TBATCH2 191 191 MR  * TEST BATCH2 WORK DISK
&BATID6 USER TBATCH1
&DISK22 LINK TBATCH1 191 191 MR  * TEST BATCH1 WORK DISK
```

```
&BATID5 USER TBATCH
&DISK20 LINK TBATCH 194 194 MR  * TEST WORK FILES
&DISK21 LINK TBATCH 195 195 MR  * TEST ACCOUNTING DATA
&DISK25 LINK TBATCH 199 199 MR  * Control file & exits
&DISK18 LINK TBATCH 191 191 MR  * TEST MONITOR 191
&DISK19 LINK TBATCH 193 193 MR  * TEST USER JOB FILES
&BATID1 USER LPMAINT
&BAS1Z LINK LPMAINT 2B2 2B2 MR  * BASE DISK
&DISK9 LINK LPMAINT 29D 29D MR  * VMBATCH HELP FILES
&DISK10 LINK LPMAINT 29E 29E MR  * VMBATCH USER CODE
&DISK17 LINK LPMAINT 22D 22D MR  * VMBATCH SOFTCOPY PUBS
&191 LINK LPMAINT 191 191 MR  * A DISK
&SAMPZ LINK LPMAINT 2C2 2C2 MR  * SAMPLE/LOCAL FILES
&DELTZ LINK LPMAINT 2D2 2D2 MR  * PRODUCT SERVICE
&APPLX LINK LPMAINT 2A6 2A6 MR  * AUX AND INVENTORY FILES
&APPLZ LINK LPMAINT 2A2 2A2 MR
&BLD0Z LINK LPMAINT 296 296 MR  * TEST - MONITOR CODE
&BLD1Z LINK LPMAINT 196 196 MR  * PROD - MONITOR CODE
&BATID4 USER BATCH2
&DISK16 LINK BATCH2 191 191 MR  * BATCH2 WORK DISK
&BATID3 USER BATCH1
&DISK15 LINK BATCH1 191 191 MR  * BATCH1 WORK DISK
&BATID2 USER BATCH
&DISK11 LINK BATCH 191 191 MR  * MONITOR 191
&DISK12 LINK BATCH 193 193 MR  * USER JOB FILES
&DISK13 LINK BATCH 194 194 MR  * WORK FILES
&DISK14 LINK BATCH 195 195 MR  * ACCOUNTING DATA
&DISK24 LINK BATCH 199 199 MR  * Control file & exits
:EDCL.
:END.
```

End of BATCH22 $PPF file

Following are the additions that must be made to include the user ID change in the BATCH service component name used during service. The additions to this file are shown below in **bold** print.

Modified BATCH22 $PPF file

```
************************************
* VM BATCH FACILITY 2.2.0          *
************************************
:OVERLST. BATCHINS BATCH
:BATCHINS. BATCHINS 5684137A
:DCL. REPLACE
&BATID7 USER TBATCH2
&DISK23 LINK TBATCH2 191 191 MR  * TEST BATCH2 WORK DISK
&BATID6 USER TBATCH1
```

```
&DISK22 LINK TBATCH1 191 191 MR  * TEST BATCH1 WORK DISK
&BATID5 USER TBATCH
&DISK20 LINK TBATCH 194 194 MR  * TEST WORK FILES
&DISK21 LINK TBATCH 195 195 MR  * TEST ACCOUNTING DATA
&DISK25 LINK TBATCH 199 199 MR  * Control file & exits
&DISK18 LINK TBATCH 191 191 MR  * TEST MONITOR 191
&DISK19 LINK TBATCH 193 193 MR  * TEST USER JOB FILES
&BATID1 USER LPMAINT
&BAS1Z LINK LPMAINT 2B2 2B2 MR  * BASE DISK
&DISK9 LINK LPMAINT 29D 29D MR  * VMBATCH HELP FILES
&DISK10 LINK LPMAINT 29E 29E MR  * VMBATCH USER CODE
&DISK17 LINK LPMAINT 22D 22D MR  * VMBATCH SOFTCOPY PUBS
&191 LINK LPMAINT 191 191 MR  * A DISK
&SAMPZ LINK LPMAINT 2C2 2C2 MR  * SAMPLE/LOCAL FILES
&DELTZ LINK LPMAINT 2D2 2D2 MR  * PRODUCT SERVICE
&APPLX LINK LPMAINT 2A6 2A6 MR  * AUX AND INVENTORY FILES
&APPLZ LINK LPMAINT 2A2 2A2 MR
&BLD0Z LINK LPMAINT 296 296 MR  * TEST - MONITOR CODE
&BLD1Z LINK LPMAINT 196 196 MR  * PROD - MONITOR CODE
&BATID4 USER BATCH2
&DISK16 LINK BATCH2 191 191 MR  * BATCH2 WORK DISK
&BATID3 USER BATCH1
&DISK15 LINK BATCH1 191 191 MR  * BATCH1 WORK DISK
&BATID2 USER BATCH
&DISK11 LINK BATCH 191 191 MR  * MONITOR 191
&DISK12 LINK BATCH 193 193 MR  * USER JOB FILES
&DISK13 LINK BATCH 194 194 MR  * WORK FILES
&DISK14 LINK BATCH 195 195 MR  * ACCOUNTING DATA
&DISK24 LINK BATCH 199 199 MR  * Control file & exits
:EDCL.
:END.
************************************
:BATCH. BATCH 5684137A
:DCL. REPLACE
&BATID7 USER TBATCH2
&DISK23 LINK TBATCH2 191 191 MR  * TEST BATCH2 WORK DISK
&BATID6 USER TBATCH1
&DISK22 LINK TBATCH1 191 191 MR  * TEST BATCH1 WORK DISK
&BATID5 USER TBATCH
&DISK20 LINK TBATCH 194 194 MR  * TEST WORK FILES
&DISK21 LINK TBATCH 195 195 MR  * TEST ACCOUNTING DATA
&DISK25 LINK TBATCH 199 199 MR  * Control file & exits
&DISK18 LINK TBATCH 191 191 MR  * TEST MONITOR 191
&DISK19 LINK TBATCH 193 193 MR  * TEST USER JOB FILES
&BATID1 USER LPMAINT
&BAS1Z LINK LPMAINT 2B2 2B2 MR  * BASE DISK
&DISK9 LINK LPMAINT 29D 29D MR  * VMBATCH HELP FILES
&DISK10 LINK LPMAINT 29E 29E MR  * VMBATCH USER CODE
&DISK17 LINK LPMAINT 22D 22D MR  * VMBATCH SOFTCOPY PUBS
```

```
&191 LINK LPMAINT 191 191 MR  * A DISK
&SAMPZ LINK LPMAINT 2C2 2C2 MR  * SAMPLE/LOCAL FILES
&DELTZ LINK LPMAINT 2D2 2D2 MR  * PRODUCT SERVICE
&APPLX LINK LPMAINT 2A6 2A6 MR  * AUX AND INVENTORY FILES
&APPLZ LINK LPMAINT 2A2 2A2 MR
&BLD0Z LINK LPMAINT 296 296 MR  * TEST - MONITOR CODE
&BLD1Z LINK LPMAINT 196 196 MR  * PROD - MONITOR CODE
&BATID4 USER BATCH2
&DISK16 LINK BATCH2 191 191 MR  * BATCH2 WORK DISK
&BATID3 USER BATCH1
&DISK15 LINK BATCH1 191 191 MR  * BATCH1 WORK DISK
&BATID2 USER BATCH
&DISK11 LINK BATCH 191 191 MR  * MONITOR 191
&DISK12 LINK BATCH 193 193 MR  * USER JOB FILES
&DISK13 LINK BATCH 194 194 MR  * WORK FILES
&DISK14 LINK BATCH 195 195 MR  * ACCOUNTING DATA
&DISK24 LINK BATCH 199 199 MR  * Control file & exits
:EDCL.
:END.
```

End of Modified BATCH22 $PPF file

You will need to compile the $PPF to create a usable version of it. Both component names must be compiled:

vmfppf batch22 batch
vmfppf batch22 batchins

You now have a new PPF that can be used during the remainder of the installation and service instructions for VM Batch Facility V2.2.

Appendix D. Setting up the Proper RACF Access Authorities

This appendix describes the steps necessary to set up the proper RACF environment necessary for VM Batch Facility V2.2. For additional information, refer to the *RACF Command Language Reference*.

1. Logon to a user ID with RACF SPECIAL authority.

2. Give the monitor machine access to the task machines' 191 disks.

   a. For the test system:

```
racf permit tbatch1.191 class(vmdisk) id(tbatch) access(update)
racf permit tbatch2.191 class(vmdisk) id(tbatch) access(update)
```

   b. For the production system:

```
racf permit batch1.191 class(vmdisk) id(batch) access(update)
racf permit batch2.191 class(vmdisk) id(batch) access(update)
```

3. Give the administrator access to the monitor's 199 disk.

   a. For the test system:

```
racf permit tbatch.199 class(vmdisk) id(p684137a) access(update)
```

   b. For the production system:

```
racf permit batch.199 class(vmdisk) id(p684137a) access(update)
```

   These commands should be repeated for each administrator defined in the CONTROL FILE.

4. Allow the task machines to act as alternate user IDs for job submittors.

   a. Activate the VMBATCH class.

```
racf setr classact(vmbatch)
```

   b. Indicate that profiles in the VMBATCH class can contain generic characters.

racf setr generic(vmbatch)

c Define a generic profile for all potential alternate user IDs.

racf rdef vmbatch * uacc(none)

d Permit the task machines to function as workers with any alternate user IDs.

1 For the test system:

racf permit * class(vmbatch) id(tbatch1) access(control)
racf permit * class(vmbatch) id(tbatch2) access(control)

2 For the production system:

racf permit * class(vmbatch) id(batch1) access(control)
racf permit * class(vmbatch) id(batch2) access(control)

Failure to establish the proper RACF environment to allow VM Batch Facility V2.2 task machines to act as alternate user IDs for job submittors will result in the following message when a job is submitted:

DGRVMC003W Job *userid nodeid jobid* **not authorized to use ALTID** *userid.*

Reader's Comments

VM Batch Facility Version 2 Release 2

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

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

RATING SCALE

very satisfied				very dissatisfied	not applicable
1	2	3	4	5	N

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
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

- Did you order this product as an independent product or as part of a package?
  - □ Independent
  - □ Package

    What type of package was ordered?

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

- Is this the first time your organization has installed this product?
  - □ Yes
  - □ No
- Were the people who did the installation experienced with the installation of VM products using VMSES/E?
  - □ Yes

    How many years of experience do they have? _____
  - □ No
- How long did it take to install this product? _____
- If you have any comments to make about your ratings above, or any other aspect of the product installation, please list them below:

  _____

  _____

  _____

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Please provide the following contact information:

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Name and Job Title

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Thank you for your participation.

Please send the completed form to the following address, or give to your IBM representative who will forward it to the VM Batch Facility Development group:

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