IBM

Program Directory for

Network Terminal Option (NTO)

Release 11

Program Number 5735-XX7

for Use with
VM/ESA

Document Date: October 1998

GI10-0998-00

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

Contents

Figures

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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 installing NTO R11 VM. 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 3 identifies the basic and optional program materials and documentation for NTO R11 VM.

- 3.0, "Program Support" on page 7 describes the IBM* support available for NTO R11 VM.

- 4.0, "Program and Service Level Information" on page 9 lists the program and service level information incorporated into NTO R11 VM.

- 5.0, "Installation Requirements and Considerations" on page 11 identifies the resources and considerations for installing and using NTO R11 VM.

- 6.0, "Installation Instructions" on page 15 provides detailed installation instructions for NTO R11 VM.

- 7.0, "Service Instructions" on page 27 provides detailed service instructions for NTO R11 VM.

- Appendix A, "APARs Incorporated into this Program" on page 37 lists the APARs incorporated into NTO R11 VM.

NTO has its own TXTLIB and MACLIB. Issue the appropriate FILEDEFs, GLOBAL TXTLIB, and GLOBAL MACLIB statements for these libraries when you generate a load module with NDF.

Before installing NTO R11 VM, read Section 3.1, "Preventive Service Planning" on page 7. This section tells you how to find any updates to the information and procedures in this program directory.

At the end of this program directory you will find a Reader's Comment Form. Please take the time to complete this form and return it to the address shown on the form. Your comments and suggestions help improve this program directory and make installation easier.

2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for NTO R11 VM is 5735-XX7. Feature numbers associated with this release are proviced in the following sections.

The program announcement material describes the features supported by NTO R11 VM. 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
- Basic, optional, and associated publications available with this program
- Publications useful during installation

2.1 Basic Machine-Readable Material

This section describes the basic machine-readable material for NTO R11 VM.

The distribution medium for this program is a 9-track magnetic tape (written at 6250 BPI), a 3480 tape cartridge, or a 4 mm cartridge. The tape or cartridge contains all the programs and data needed for installation. NTO R11 VM is installed using VM/SES. See 6.0, "Installation Instructions" on page 15 for more information about how to install the program.

2.1.1 NTO Base Product

Figure 1 describes the program tape or cartridge for the NTO R11 VM program.

Figure 1. Basic Material: Program Tape or Cartridge

Medium	Feature Number	Physical Volume	Tape Content	External Tape Label
6250 tape	7405	1	NTO R11 VM	VM 5735XX700
3480 cart.	7406	1	NTO R11 VM	VM 5735XX700
4 mm cart.	5798	1	NTO R11 VM	VM 5735XX700

Figure 2 describes the file content of the program tape or cartridge for the NTO R11 VM program.

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

Tape File	Content
1	Tape Header

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

Tape File	Content
2	Tape Header
3	Product Header
4	Product Memo
5	Service Apply Lists
6	PTFPARTS
7	NTO R11 VM Service
8	NTO R11 VM Service
9	NTO R11 VM Base Code
10	NTO R11 VM Executable Code

2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for NTO R11 VM.

2.3 Program Publications

The following sections identify the basic and optional publications for NTO R11 VM.

2.3.1 Basic Program Publications

Figure 3 identifies the basic program publications for NTO R11 VM. One copy of each of these publications is included when you order the basic materials. For additional copies, contact your IBM representative. A fee is charged for additional copies.

Figure 3. Basic Material: Program Publications

Publication Title	Form Number
Network Terminal Option Planning, Migration, and Resource Definition	SC30-3347
Licensed Program Specifications for Network Terminal Option Release 11	GC38-0299

2.3.2 Optional Program Publications

Figure 4 identifies the optional licensed program publications for NTO R11 VM. The first copy is available at no charge to licensees of the basic material by ordering the 7xxx feature number. Order additional copies using the 8xxx feature number. A fee is charged for additional copies.

Figure 4. Optional Material: Licensed Publications

Publication Title	Form Number	Feature Number First Copy	Feature Number Additional Copy
Network Terminal Option Diagnosis	LY30-3194	7046	8323

2.3.3 Softcopy Publications

All NTO R11 VM manuals, licensed and unlicensed, except for *Licensed Program Specifications*, are offered in displayable softcopy form on the media listed in Figure 5.

Figure 5. Softcopy Publications

Title	Form Number	Feature Number First Copy	Feature Number Additional Copy
ACF/NCP, ACF/SSP, EP, NPSI, and NTuneMON Softcopy Collection Kit (CD-ROM)	LK2T-0414*	7110	8110

Note: An asterisk (*) beside the Form Number indicates that it contains "Restricted Materials of IBM."

Order this collection kit under the NCP product code. (It is not orderable under NTO.)

2.3.4 Publications Associated with NTO R11 VM

Figure 6 identifies publications that may be helpful when you use NTO R11 VM. To order copies, contact your IBM representative. A fee is charged for each copy of these publications.

Figure 6. Publications Associated with NTO R11 VM

Publication Title	Order/Form Number
Planning for NetView*, NCP, and VTAM*	SC31-8063
Planning for Integrated Networks	SC31-8062

2.4 Microfiche Support

Microfiche program listings are not provided with NTO R11 VM. Customers with access to View Program Listings (VPL), such as through SoftwareXcel Extended, can access program listings formerly provided through microfiche.

Those customers without access to VPL can contact their IBM representative.

The VPL facility provides online viewing of program listings that are available to customers.

2.5 Publications Useful During Installation

The publications listed in Figure 7 on page 6 or Figure 8 on page 6, depending on your VM/ESA release, may be useful during the installation of NTO R11 VM. To order copies, contact your IBM representative.

Figure 7. Publications Useful During Installation / Service on VM/ESA Version 2.2.0

Publication Title	Form Number
VM/ESA: VMSES/E Introduction and Reference	SC24-5747
VM/ESA: Service Guide	SC24-5749
VM/ESA: Planning and Administration	SC24-5750
VM/ESA: CMS Command Reference	SC24-5776
VM/ESA: CMS File Pool Planning, Administration, and Operation	SC24-5751
VM/ESA: System Messages and Codes	SC24-5784

Figure 8. Publications Useful During Installation / Service on VM/ESA Version 2.3.0

Publication Title	Form Number
VM/ESA: VMSES/E Introduction and Reference	GC24-5837
VM/ESA: Service Guide	GC24-5838
VM/ESA: Planning and Administration	SC24-5750
VM/ESA: CMS Command Reference	SC24-5776
VM/ESA: CMS File Pool Planning, Administration, and Operation	SC24-5751
VM/ESA: System Messages and Codes	GC24-5841

3.0 Program Support

This section describes the IBM support available for NTO R11 VM.

3.1 Preventive Service Planning

Before installing NTO R11 VM, check with your IBM Support Center or use IBMLink (Service Link) to determine if there is additional Preventive Service Planning (PSP) information. To obtain this information, specify the following UPGRADE and SUBSET values:

Figure 9. PSP Upgrade and Subset ID

COMPID	Retain Release	Upgrade	Subset
5735XX700	1B0	NTO1B0	1B0

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 10 identifies the component ID (COMPID), RETAIN Release, and Field Engineering Service Number (FESN) for NTO R11 VM.

Figure 10. Component Identifiers

COMPID	Retain Release	Component Name	FESN
5735XX700	1B0	NTO V1R11 VM	6411202

4.0 Program and Service Level Information

This section identifies the program and any relevant service level information of NTO R11 VM. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs shipped with this program. Information about the cumulative service tape is also provided.

4.1 Program Level Information

The program level refers to the APAR fixes incorporated into NTO R11 VM.

See Appendix A, "APARs Incorporated into this Program" on page 37, for a list of APARs incorporated into this program.

4.2 Service Level Information

The service level refers to the PTFs shipped with NTO R11 VM.

Check the NTO1B0 PSP bucket for any additional PTFs that should be installed or any additional install information.

4.3 Cumulative Service Tape

Cumulative service for NTO R11 VM 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 NTO R11 VM.

5.1 Program Considerations

The following sections list the programming considerations for installing NTO R11 VM.

5.1.1 Operating System Requirements

The operating system requirements for NTO R11 VM are defined by SSP V4R7 VM/ESA, licensed program number 5654-009.

5.1.2 Other Program Product Requirements

5.1.2.1 Programming Requirements:

A platform-dependent BookManager product is required to display softcopy publications on CD-ROM. Limited function DOS, Windows, and OS/2 versions of these products are available on your CD-ROM. For more information or to order full-function releases of these products, or VM or MVS versions, refer to the IBM BookManager home page at **http://booksrv2.raleigh.ibm.com**.

5.1.2.2 Machine Requirements:

NTO R11 VM operates on any IBM 3745 communication controller.

5.1.2.3 Minimum Requisites:

A minimum requisite is defined as one of the following:

- *Installation Requisite:* A product that is required at installation time. i.e. this product **will not install** successfully unless this requisite is met.

- *Run Time Requisite:* A product that is **not** required for the successful installation of this product, but **is** needed at run time in order for this product to work.

NTO R11 VM requires the following program products:

- SSP V4R7 VM (licensed program number 5654-009)
- NCP V7R7 VM (licensed program number 5648-063)

5.1.2.4 Functional Requisites:

There are no functional requisites for NTO R11 VM.

5.1.2.5 Compatibility Requisites:

There are no compatibility requisites for NTO R11 VM.

5.2 Program Installation and Service Considerations

This section describes items that should be considered before you install or service NTO R11 VM.

- 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). Refer to 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 NTO R11 VM strictly using the MAINT user ID, but will use a new user ID--P735XX7P. 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 above change during the installation procedure 6.2, "Plan Your Installation For NTO R11 VM" step 6 on page 17, rather than after you have installed this product.

5.3 DASD Storage and User ID Requirements

Figure 11 on page 12 lists the user IDs, minidisks, and default SFS directory names that are used to install and service NTO R11 VM.

Important Installation Notes:

- User ID(s) and minidisks or SFS directories will be defined in 6.2, "Plan Your Installation For NTO R11 VM" on page 16 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.

- P735XX7P 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 NTO R11 VM," step 6 on page 17 .

  Note: If you choose to install NTO R11 VM on a common user ID, the default minidisk addresses for NTO R11 VM may already be defined. If any of the default minidisks required by NTO R11 VM are already in use, you have to create an override to change the default minidisks for NTO R11 VM so they are unique.

Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4-K Blocks	Usage
		DASD	CYLS			Default SFS Directory Name
P735XX7P	2B2	3390 3380 9345	4 5 5	6000	750	Contains all the base code shipped with NTO R11 VM **VMSYS:P735XX7P.NTO.OBJECT**
P735XX7P	2C2	3390 3380 9345	4 5 5	6000	750	Contains customization files. This disk may also be used for local modifications. **VMSYS:P735XX7P.NTO.LOCAL**
P735XX7P	2D2	3390 3380 9345	4 5 5	6000	750	Contains serviced files **VMSYS:P735XX7P.NTO.DELTA**
P735XX7P	2A6	3390 3380 9345	4 5 5	6000	750	Contains AUX files and software inventory tables that represent the test service level of NTO R11 VM **VMSYS:P735XX7P.NTO.APPLYALT**
P735XX7P	2A2	3390 3380 9345	4 5 5	6000	750	Contains AUX files and software inventory tables that represent the service level of NTO R11 VM that is currently in production. **VMSYS:P735XX7P.NTO.APPLYPRD**
P735XX7P	400	3390 3380 9345	4 5 5	6000	750	Test BUILD disk. This code will be copied to a production disk. **VMSYS:P735XX7P.NTO.TRUN**
P735XX7P	401	3390 3380 9345	4 5 5	6000	750	Production BUILD disk. Files from the test BUILD disk are copied here for application use. **VMSYS:P735XX7P.NTO.RUN**
P735XX7P	191	3390 3380 9345	4 5 5	6000	750	P735XX7P user ID's 191 minidisk **VMSYS:P735XX7P.**

Figure 11. DASD Storage Requirements for Target Minidisks

Note: Cylinder values defined in this table are based on a 4-K block size. FB-512 block and SFS values are derived from the 3380 cylinder values in this table. The FBA blocks are listed as 1/2-K but should be CMS formatted at 1-K size. 6000 4-K blocks are needed for SFS install.

6.0 Installation Instructions

This section describes the installation methods and the step-by-step procedures to install NTO R11 VM.

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 refer to "Understanding Dialogs with the System" in *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 NTO R11 VM, adapt these instructions as needed for your environment.

Note!

The sample console output presented throughout these instructions was produced on a VM/ESA R2.2.0 system. If you are installing NTO R11 VM 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 NTO R11 VM using VMSES/E.

- Plan Your Installation

  Use the VMFINS command to load several VMSES/E files from the product tape and to obtain NTO R11 VM resource requirements.

- Allocate 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 NTO R11 VM.

- Install the NTO R11 VM Product

  Use the VMFINS command to load the NTO R11 VM product files from tape to the test BUILD and BASE minidisks/directories. VMFINS is used to update the VM SYSBLDS file used by VMSES/E for software inventory management.

- Place NTO R11 VM Files into Production

  Once the product files have been installed and the operation of NTO R11 VM is satisfactory, the product files are copied from the test BUILD disk to the production BUILD disk.

For a complete description of all VMSES/E installation options, refer to *VMSES/E Introduction and Reference*.

6.2 Plan Your Installation For NTO R11 VM

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 and minidisk/SFS directory requirements
    - required products

To obtain planning information for your environment:

1 Log on as NTO R11 VM installation planner.

> This user ID can be any ID that has read access to MAINT's 5E5 minidisk and write access to the MAINT 51D minidisk.

2 Mount the NTO R11 VM installation tape and attach it to NTO R11 VM installation planner 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   The MAINT 5E5 disk contains the VMSES/E code.
access 5e5 b

4 Establish write access to the Software Inventory disk.

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

> **Note:**   If another user already has the MAINT 51D minidisk linked in write mode (R/W), you only obtain read access (R/O) to this minidisk. If this occurs, you need to have that user re-link the 51D in read-only mode (RR), and 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 NTO R11 VM 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 NTO R11 VM.

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

vmfins install ppf 5735XX7P {NTO | NTOSFS} (plan nomemo

Use **NTO** for installing on minidisks or **NTOSFS** 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 need to use your changed values instead of those indicated (when appropriate), throughout the rest of the installation instructions, as well as the instructions for servicing NTO R11 VM. For example, you need to specify your PPF override file name instead of 5735XX7P for certain VMSES/E commands.

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

    c. For more information about changing the VMSYS file pool name, refer to *VMSES/E Introduction and Reference*.

```
VMFINS2760I VMFINS processing started
VMFREQ2805I Product 5735XX7P component NTO passed requisite checking
Do you want to create an override for 5735XX7P NTO (prodid 5735XX7P)?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFRMT2760I VMFRMT processing started
VMFRMT2760I VMFRMT processing completed successfully
VMFPLA1909I 5735XX7P 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 proceeding. For information about handling specific error messages, refer to *VM/ESA: System Messages and Codes,* or use on-line HELP.

vmfview install

6.3 Allocate Resources for Installing NTO R11 VM

Use the planning information in the 5735XX7P PLANINFO file, created in the **PLAN** step, to:

- Create the P735XX7P user directory for minidisk install

  OR

- Create the P735XX7P user directory for SFS install

6.3.1 Installing NTO R11 VM on Minidisk

1 Obtain the user directory from the 5735XX7P 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 P735XX7P user ID. Use the directory entry found in PLANINFO as a model for input to your system directory.

2 Add the MDISK statements to the directory entry for P735XX7P. Use Figure 11 on page 12 to obtain the minidisk requirements.

3 If you are installing NTO R11 VM on a VM/ESA 370 system, the following directory entry change must be made:

- For the P735XX7P directory entry:
    - – Change the user ID storage from 24M to 16M.
    - – Comment out or remove the MACHINE XA statement from the directory entry.

4 Add the P735XX7P directory to the system directory. Change the password for P735XX7P 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 P735XX7P user ID must be formatted before installing NTO R11 VM.

6.3.2 Installing NTO R11 VM in SFS Directories

1 Obtain the user directory from the 5735XX7P PLANINFO file.

Note: The user directory entry is located at the bottom of the PLANINFO file of the resource section; these entries contain all of the links and privilege classes necessary for the P735XX7P user ID. Use the directory entry found in PLANINFO as a model for input to your system directory.

2 If you are installing NTO R11 VM on a VM/ESA 370 Feature system, the following directory entry change must be made:

- For the P735XX7P directory entry:
    - – Change the user ID storage from 24M to 16M.

– Comment out or remove the MACHINE XA statement from the directory entry.

3 Add the P735XX7P directory to the system directory. Change the password for P735XX7P 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 also requires 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 NTO R11 VM SFS directories, the 4K block requirements for each NTO R11 VM are summarized in Figure 11 on page 12

This information is used when enrolling the P735XX7P to the VMSYS filepool.

b Enroll user P735XX7P in the VMSYS filepool using the ENROLL USER command:

ENROLL USER P735XX7P 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 NTO R11 VM. 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 NTO R11 VM, you need to add space to the filepool. Refer to *VM/ESA SFS/CRR Planning, Administration, and Operation* for information about adding space to a filepool.

d Create the necessary subdirectories listed in the 5735XX7P PLANINFO file using the CREATE DIRECTORY command.

set filepool vmsys: **create directory** *dirid*	*dirid* is the name of the SFS directory you're creating, such as:

```
create directory vmsys:P735XX7P.NTO
create directory vmsys:P735XX7P.NTO.object
   :
```

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

A complete list of default NTO SFS directories is provided in Figure 11 on page 12.

e If you intend to use an SFS directory as the work space for the P735XX7P user ID, include the following IPL control statement in the P735XX7P directory entry:

```
IPL CMS PARM FILEPOOL VMSYS
```

This will cause CMS to automatically access the P735XX7P's top directory as file mode A.

6.4 Install NTO R11 VM

The *ppfname* used throughout these installation instructions is **5735XX7P**, which assumes you are using the PPF supplied by IBM for NTO R11 VM. If you have your own PPF override file for NTO R11 VM, you should use your file's *ppfname* instead of **5735XX7P**. The *ppfname* you use should be used **throughout** the rest of this procedure.

1 Log on to the installation user ID **P735XX7P**.

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**	If either 5E5 or 51D is in a shared file system (SFS) then substitute your SFS directory name in the 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 minidisk was accessed R/O, you need to have the user who has it linked R/W link it as R/O. You can then issue the following commands to obtain R/W access to it.

link MAINT 51d 51d mr
access 51d d

5 Mount the NTO R11 VM installation tape and attach it to P735XX7P at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.

6 Install NTO R11 VM.

Notes:

If you have already created a PPF override file, you should specify your override file name after the **PPF** keyword for the following VMFINS command.

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

vmfins install ppf 5735XX7P {NTO | NTOSFS} (nomemo nolink

Use **NTO** for installing on minidisks or **NTOSFS** 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 5735XX7P component NTO passed requisite checking
Do you want to create an override for 5735XX7P NTO (prodid 5735XX7P)?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINT2760I VMFINST processing started
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   400   SES400
VMFUTL2205I BASE1     J     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 9800
VMFREC1851I (1 of 6) VMFRCAXL processing AXLIST
VMFRCX2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (2 of 6) VMFRCPTF processing PARTLST
VMFRCP2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (3 of 6) VMFRCCOM processing DELTA
VMFRCC2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (4 of 6) VMFRCALL processing APPLY
VMFRCA2159I Loading part(s) to APPLY 2A6 (F)
VMFRCA2159I Loaded 1 part(s) to APPLY 2A6 (F)
VMFREC1851I (5 of 6) VMFRCALL processing BASE
VMFRCA2159I Loading part(s) to BASE1 2B2 (J)
VMFRCA2159I Loaded 198 part(s) to BASE1 2B2 (J)
VMFREC1851I (6 of 6) VMFRCALL processing BUILD
VMFRCA2159I Loading part(s) to BUILD0 400 (I)
VMFRCA2159I Loaded 3 part(s) to BUILD0 400 (I)
VMFREC2760I VMFREC processing completed successfully
VMFINT2603I Product installed
VMFINS2760I VMFINS processing completed successfully
```

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

vmfview install

6.4.1 Update Build Status Table for NTO R11 VM

1 Update the VM SYSBLDS software inventory file for NTO R11 VM.

vmfins build ppf 5735XX7P {NTO | NTOSFS} (serviced nolink

Use **NTO** for installing on minidisks or **NTOSFS** 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 5735XX7P has been built.

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

vmfview install

6.5 Place NTO R11 VM Into Production

This section describes the procedure to place NTO R11 VM into production.

6.5.1 Copy NTO R11 VM Files Into Production

1 Log on to P735XX7P user ID. This user ID owns the disk that will contain the "production" level of the NTO R11 VM code.

a If installing using minidisks

access 400 e
access 401 f
vmfcopy * * e = = f2 (prodid 5735XX7P%NTO olddate replace

The VMFCOPY command will update the VMSES PARTCAT file on the 401 disk.

b If installing using Shared File System

access P735XX7P.NTO.trun e
access P735XX7P.NTO.run f
vmfcopy * * e = = f2 (prodid 5735XX7P%NTO olddate replace

The VMFCOPY command will update the VMSES PARTCAT file on the 401 disk.

NTO R11 VM is now installed and built on your system.

7.0 Service Instructions

This section contains the procedure to install CORrective service to NTO R11 VM. VMSES/E is used to install service for NTO R11 VM.

To become more familiar with service using VMSES/E, you should read the introductory chapters in *VMSES/E Introduction and Reference*. This manual also contains 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 NTO R11 VM using VMSES/E.

- Setup Environment

  Access the software inventory disk. Use VMFSETUP command to establish the correct minidisk access order.

- Merge 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.

- Receive Service

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

- Apply 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.

- Reapply 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.

- Build New Levels

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

- Place 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 disk, re-saving the NSS (Named Saved System).

7.2 Servicing NTO R11 VM

This section describes the prodecure to service NTO R11 VM.

7.2.1 Prepare to Receive Service

The *ppfname* used throughout these servicing instructions is **5735XX7P**, which assumes you are using the PPF supplied by IBM for NTO R11 VM. If you have your own PPF override file for NTO R11 VM, you should use your file's *ppfname* instead of **5735XX7P**. The *ppfname* you use should be used **throughout** the rest of this procedure, unless otherwise stated differently.

1 Log onto NTO R11 VM service user ID **P735XX7P**

2 Establish access to the software inventory disk.

> **Note:** If the MAINT 51D minidisk was accessed R/O, you need to have the user that has it accessed R/W link it R/O. You can then issue the following commands to obtain R/W access to it.

link MAINT 51d 51d mr
access 51d d

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

3 Have the NTO R11 VM CORrective service tape mounted and attached to **P735XX7P**.

4 Establish the correct minidisk access order.

vmfsetup 5735XX7P {NTO | NTOSFS}

> 5735XX7P is the PPF that was shipped with the product. If you have your own PPF override, you should substitute your PPF name for 5735XX7P.
>
> Use **NTO** for installing on minidisks or **NTOSFS** for installing in Shared File System directories.

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 5735XX7P {NTO | NTOSFS} apply

> Use **NTO** for installing on minidisks or **NTOSFS** 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 proceeding. For information about handling specific error messages, refer to *VM/ESA System Messages and Codes*, or use on-line HELP.

vmfview mrd

7.2.2 Receive the Service

Note: If you are installing multiple service tapes, you can receive all of the service for this prodid before applying and building it.

Electronic Service

If you are receiving service from Service Link (electronic service), refer to Appendix A, "Receiving Service for VMSES Envelopes", section "Receive the Service", in the *VM/ESA Service Guide.* Remember to substitute the *ppfname* and *compname* used for servicing NTO R11 VM in the instructions shown in that Appendix. Then return back to this program directory and continue with section 7.2.3, "Apply the Service."

For **each** service tape you want to receive, do the following:

1 Receive the service.

vmfrec ppf 5735XX7P {NTO | NTOSFS}

> Use **NTO** for installing on minidisks or **NTOSFS** for installing in Shared File System directories.
>
> This command receives service from your service tape. All new service is loaded to the DELTA disk.

2 Review the receive message log ($VMFREC $MSGLOG). If necessary, correct any problems before proceeding. For information about handling specific error messages, refer to *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 5735XX7P {NTO | NTOSFS}

Use **NTO** for installing on minidisks or **NTOSFS** 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 on the alternate apply disk.

You must review the VMFAPPLY message log if you receive a return code (RC) of a 4, as this may indicate that you have local modifications that need to be reworked.

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

vmfview apply

Note

If you get message VMFAPP2120W, re-apply any local modifications before building the new NTO R11 VM. Refer to 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 **5735XX7P**

- **esa** should be **5735XX7P**

- *compname* should be **NTO** or **NTOSFS** (minidisk or SFS)

- *appid* should be **5735XX7P**

- *fm-local* should be the fm of 2C2

- *fm-applyalt* should be the fm of 2A6

If you have changed any of the installation parameters through a PPF override, you need to substitute your changed values where applicable.

Keep in mind when you get to the "Rebuilding Objects" step in *VM/ESA Service Guide*, you should return to this program directory at 7.2.4, "Update the Build Status Table."

7.2.4 Update the Build Status Table

1 Update the Build Status Table with serviced parts.

vmfbld ppf 5735XX7P {NTO | NTOSFS} (status

Use **NTO** for installing on minidisks or **NTOSFS** for installing in Shared File System directories.

This command updates the Build Status Table.

```
┌─ Note ──────────────────────────────────────────────────────────────────┐
│                                                                          │
│ If the $PPF files have been serviced, you get the following prompt:      │
│                                                                          │
│ VMFBLD2185R The following source product parameter files                 │
│             have been serviced:                                          │
│ VMFBLD2185R 5735XX7P $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 your 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 a 0 and complete the following steps before you continue.

```
VMFBLD2188I Building 5735XX7P $PPF
            on 191 (A) from level $PFnnnnn
```

vmfppf 5735XX7P {NTO | NTOSFS}	**Note:** If you created your own PPF override, use your PPF name instead of 5735XX7P.
	Use **NTO** for installing on minidisks or **NTOSFS** for installing in Shared File System directories.
copyfile 5735XX7P $PPF a = = d (olddate replace **erase 5735XX7P $PPF a**	
	Note: **Do not** use your own PPF name in place of 5735XX7P for the COPYFILE and ERASE commands.
vmfbld ppf 5735XX7P {NTO | NTOSFS} (status	
1	Re-issue VMFBLD to complete updating the build status table.
	Use **NTO** for installing on minidisks or **NTOSFS** for installing in Shared File System directories. When you receive the prompt that was previously displayed, enter a 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 NTO R11 VM serviced parts.

vmfbld ppf 5735XX7P {NTO | NTOSFS} (serviced

> > Use **NTO** for installing on minidisks or **NTOSFS** for installing in Shared File System directories.

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

vmfview build

7.3 Place the New NTO R11 VM Service Into Production

> This section describes the procedure to place the new NTO R11 VM Service into production.

7.3.1 Copy the New NTO R11 VM Serviced Files Into Production

> **1** Log on to P735XX7P user ID. This user ID owns the disk that will contain the "production" level of the NTO R11 VM code.

> > **a** If installing using minidisks

access 400 e
access 401 f
vmfcopy * * e = = f2 (prodid 5735XX7P%NTO olddate replace

> > The VMFCOPY command will update the VMSES PARTCAT file on the 401 disk.

b If installing using Shared File System

access P735XX7P.NTO.trun e
access P735XX7P.NTO.run f
vmfcopy * * e = = f2 (prodid 5735XX7P%NTO olddate replace

The VMFCOPY command will update the VMSES
PARTCAT file on the 401 disk.

You have finished servicing NTO R11 VM.

Appendix A. APARs Incorporated into this Program

The following NTO R10 APARs are incorporated into this program:

IR30488
IR32153

Reader's Comments

Program Directory for Network Terminal Option Release 11 for VM

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                            very           not             │
│  satisfied  <====================> dissatisfied  applicable      │
│     1       2       3       4       5            N               │
└──────────────────────────────────────────────────────────────────┘
```

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Contents of program directory	1	2	3	4	5	N
Installation Verification Programs	1	2	3	4	5	N
Time to install the product	1	2	3	4	5	N
Readability and organization of program directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
Accuracy of the definition of the installation tasks	1	2	3	4	5	N
Technical level of the installation tasks	1	2	3	4	5	N
Ease of getting the system into production after installation	1	2	3	4	5	N

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

__   Independent
__   Package

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

__   CustomPac

    __   FunctionPac
    __   SystemPac

__   System Delivery Offering (SDO)

__   Other - Please specify type: . . . .

Is this the first time your organization has installed this product?

__   Yes

___   No

Were the people who did the installation experienced with the installation of VM products?

___   Yes
___   No

If yes, how many years? __

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:

_____

Name and Job Title

_____

Organization

_____

_____

Address

_____

Telephone

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 Network Terminal Option R11 Development group):

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