VAX VTX
Installation Guide

Order Number: AA-FS81F-TE

This guide explains how to install VAX VTX and run the Installation Verification Procedure.

Revision/Update Information:	This is a revised manual.
Operating System:	VMS
Software Version:	VAX VTX Version 4.1

digital equipment corporation
maynard, massachusetts

April 1990

The information in this document is subject to change without notice and should not be construed as a commitment by Digital Equipment Corporation. Digital Equipment Corporation assumes no responsibility for any errors that may appear in this document.

The software described in this document is furnished under a license and may be used or copied only in accordance with the terms of such license.

© Digital Equipment Corporation 1989.

All Rights Reserved.
Printed in U.K.

The postpaid Reader's Comments forms at the end of this document request your critical evaluation to assist in preparing future documentation.

The following are trademarks of Digital Equipment Corporation:

ALL-IN-1	PDP	VMS
DEC	Professional	VT
DECmate	Rainbow	VTX20
DECnet	ReGIS	WPS-PLUS
DECtalk	UNIBUS	
DECUS	VAX	
DECwindows	VAX VTX	
DECwrite	VAXstation	digital™

IBM® is a registered trademark of International Business Machines Corporation.
CROSSTALK XVI™ is a trademark of MicrosTuf, Inc.
Mark IV™ is a trademark of Norpak Corporation, Ontario, Canada.
SONY™ is a trademark of Sony Corporation.
Minitel™ is a trademark of Intelmatique, France.
MS-DOS™ is a registered trademark of MicroSoft Corporation.

AA-FS81F-TE

Contents

Preface ix

Chapter 1 Preparing to Install VAX VTX

1.1 Required Operating System Components 1–1

1.2 Prerequisite Software 1–2

1.3 Optional Software 1–2

1.4 Prerequisite Hardware 1–2

1.5 VAX VTX Licensing 1–3
1.5.1 License Management 1–3

1.6 Installation Procedure Requirements 1–4
1.6.1 Media 1–4
1.6.2 Time 1–4
1.6.3 Privileges 1–4
1.6.4 Disk Space 1–5
1.6.5 System Parameters 1–6
1.6.5.1 VIRTUALPAGECNT 1–6
1.6.5.2 CTLPAGES 1–6
1.6.6 GBLPAGES and GBLSECTIONS 1–7
1.6.6.1 Checking System Parameter Values 1–7
1.6.6.2 Changing System Parameter Values with AUTOGEN 1–8
1.6.7 Page File Quota 1–8
1.6.8 Process Account Quotas 1–9
1.6.9 VMSINSTAL Requirements 1–10
1.6.10 Backing Up Your System Disk 1–11

1.6.11 VAX VTX Requirements 1–11
1.6.12 IVP Requirements 1–11
1.6.13 The VAX VTX VISTA Utility 1–12
1.6.14 Converting Previous VTX Files to VAX VTX Version 4.0 Format 1–12

Chapter 2 Installing VAX VTX

2.1 General Information 2–1
2.1.1 Accessing the Online Release Notes 2–1
2.1.2 Running the Installation Verification Procedure (IVP) 2–2
2.1.3 Aborting the Installation 2–2

2.2 The Installation Procedure 2–2
2.2.1 Invoking VMSINSTAL 2–2
2.2.2 Installation Questions 2–4
2.2.3 Informational Messages 2–12
2.2.4 Running the Installation Verification Procedure 2–12
2.2.5 Completing the Installation Procedure 2–13

2.3 Installing the MS-DOS TCP on Your Personal Computer 2–13

2.4 Error Recovery 2–17

Chapter 3 After Installing VAX VTX

3.1 Establishing a VAX VTX Print Queue 3–1
3.1.1 Editing the System Startup File 3–1
3.1.2 Configuring Print Tables for VTX$QUEUE 3–2
3.1.3 DCLTABLES 3–4

3.2 Cluster Considerations 3–4

3.3 Subscriber Account Privileges and Quotas 3–5
3.3.1 Privileges 3–5
3.3.2 Account Quotas 3–5

3.4 Defining System Logicals 3–6

3.5 DECnet 3–6
3.5.1 Establishing a DECnet Node 3–7
3.5.2 Starting DECnet 3–7

3.6 Creating a VTX Operator Account 3–8

3.7 Using Search Lists 3–9

3.8 Enhancing VAX VTX Performance 3–9
3.8.1 Tuning Your System 3–10
3.8.2 Installing VAX VTX as a Shared Image 3–10

3.9 Deleting the [.VTX$VISTA] Subdirectory 3–12

3.10 Print Queue and Workbench Output Files Directory 3–12

3.11 Workbench Server Command Procedure Changes 3–12

3.12 VAS Command Procedure Changes 3–13

3.13 Determining and Reporting Problems 3–13

Chapter 4 Installation Verification Procedure

4.1 Running the VAX VTX IVP 4–1

4.2 Performing the Optional Part of the IVP 4–3

4.3 Conclusion 4–4

Appendix A Sample Installation

Appendix B VTX Files and Logical Names Installed on Your System

B.1 File Names B–1
B.1.1 SYS$COMMON:[ELKLIB] B–1
B.1.2 SYS$COMMON:[RUSLLIB] B–2
B.1.3 SYS$COMMON:[SYS$STARTUP] B–2
B.1.4 SYS$COMMON:[SYSEXE] B–3
B.1.5 SYS$COMMON:[SYSHLP] B–3
B.1.6 SYS$COMMON:[SYSLIB] B–4
B.1.7 SYS$COMMON:[SYSMSG] B–5
B.1.8 SYS$COMMON:[SYSTEST.VTX] B–5
B.1.9 SYS$COMMON:[SYSTEST] B–5

B.1.10 SYS$COMMON:[TCPLIB] B–6
B.1.11 SYS$COMMON:[VASLIB] B–8
B.1.12 SYS$COMMON:[VTX$LIBRARY] B–9

B.2 Logical Names B–10

Index

Tables

1–1 Disk Space Requirements 1–5
1–2 Process Account Quotas for the Installing Account 1–9
2–1 Files Made Obsolete by Installation Procedure 2–10
3–1 Subscriber Account Quotas for Using VAX VTX 3–5
3–2 Required System Parameter Values 3–10
3–3 Workbench Server Command Procedure Changes 3–13

Preface

Purpose of This Manual

This manual explains how to install and verify VAX VTX Version 4.1. The installation procedure uses VMSINSTAL.

Intended Audience

This manual is intended for anyone responsible for installing and maintaining a VAX VTX system. To install this product, you must have access to a privileged system manager account.

Operating System Information

To verify which versions of your operating system are compatible with this version of VAX VTX, check the Software Product Description (SPD) which is included in the VAX VTX kit.

Structure of This Manual

This manual is organized as follows:

Chapter 1	Describes the preparations you must complete before you can install VAX VTX Version 4.1.
Chapter 2	Describes the VAX VTX Version 4.1 installation procedure and how to install the MS-DOS TCP on a Personal Computer.
Chapter 3	Describes the tasks you must complete after you install VAX VTX Version 4.1.
Chapter 4	Contains more detailed information about running the Installation Verification Procedure (IVP).
Appendix A	Contains a sample VAX VTX Version 4.1 installation.
Appendix B	Lists the files and system logicals installed on the system during the VAX VTX installation.

Related Documentation

The documentation set for VAX VTX consists of:

VAX VTX Installation Guide
VAX VTX Guide to Designing and Implementing an Infobase
VAX VTX Information Provider's Guide
VAX VTX Operator's Guide
VAX VTX Guide to Modifying the Terminal Control Program (TCP)
VAX VTX Subscriber's Booklet
VAX VTX/VALU Summary Description
VAX VTX/VALU Guide to Using VAS
VAX VTX/VALU Guide to Using RUSL
VAX VTX/VALU Guide to Using ELK

VAX VTX Version 4.1 also comes with online release notes, which you can access in SYS$HELP:VTX041.RELEASE_NOTES.

A glossary for all the VAX VTX manuals is contained in the *VAX VTX Guide to Designing and Implementing an Infobase*. A glossary for all the VAX VTX/VALU manuals is contained in the *VAX VTX/VALU Summary Description*.

For more information about the License Management Utility (LMF), VMSINSTAL, or modifying account quotas see the VMS documentation set. For more information about using AUTOGEN, see the *VMS System Management Subkit*.

Conventions

$	The system prompt. It indicates that the VMS command interpreter is ready for command input.
. . .	Information not directly related to the example has been omitted.
Return	Press the Return key.
`Red print`	Shows user input. All characters the system prints or displays are in black.
Ctrl/x	Indicates that you press the Ctrl key and another key.

Chapter 1

Preparing to Install VAX VTX

This chapter discusses the preparations and requirements necessary for installing VAX VTX.

Your bill of materials (BOM) and indented bills report (BIL) specify the number and contents of your media. Be sure to verify the contents of your kit with this information. If your kit is damaged or if parts are missing, contact your Digital representative.

VAX VTX provides online release notes. Digital strongly recommends that you read the release notes before you proceed with the installation.

1.1 Required Operating System Components

Before you attempt to install VAX VTX, you must be running VMS Version 5.1 (or higher) on your system. The following VMS tailoring classes are required to enable the full capabilities of VAX VTX:

- VMS Required Saveset
- NETWORK Support
- PROGRAMMING Support
- Secure User's Environment
- Utilities

DECwindows is required only if you will be using VAX VTX through the DECwindows interface.

1.2 Prerequisite Software

If you are using the VAS component of VAX VTX in an IBM or IBM-compatible environment, you must install DECnet/SNA VMS APPL/LU6.2 Version 2.0 (or higher) before you install VAX VTX.

1.3 Optional Software

The following Digital software products are compatible with VAX VTX Version 4.1 and can be used with it:

- DECnet-VAX V5.3
- WPS-PLUS Version 3.1
- ALL-IN-1 Version 2.3
- VAX BLISS-32 V4.6
- VAX P.S.I. Access Version 4.2
- DECnet/SNA VMS APPL/LU6.2 Version 2.0
- DECnet/SNA VMS 3270 Data Stream Programming Interface Version 1.4

See the System Software Addendum (SSA) for a complete list of compatible products and their required version numbers. The SSA is part of the Software Product Description (SPD).

1.4 Prerequisite Hardware

The VAX VTX Installation Verification Procedure (IVP) is provided in two parts. You need only a hardcopy terminal to run the first part, but you must use a video terminal to run the second part. See Chapter 4 for additional information on the IVP.

1.5 VAX VTX Licensing

The terms and conditions of your license agreement determine your legal use of the VAX VTX software; the License Managment Facility (LMF) is a management tool that helps you to comply with this license agreement. This section describes the types of licenses offered for VAX VTX, the things you need to consider when deciding which VTX licenses to purchase, and how to use LMF to register and manage your VTX licenses.

Two types of licensing are offered for VAX VTX: **Activity licensing** and **Availability licensing**. With either type of licensing, you obtain the right to run one or more VAX VTX Servers and Update Servers on a system. In some special configurations, you may also need one of the forms of licensing to run an ELK application on a system.

1.5.1 License Management

With the VMS License Management Facility (LMF), you can do the following:

- Register a VTX software license Product Authorization Key (PAK) in the LICENSE database
- Register additional availability or activity license PAKs
- Activate the license information to authorize a product for use
- Display current and previous license data
- Include and exclude product access on nodes in a VAXcluster environment
- Move a software license to another system

Refer to the *VMS License Management Utility Manual* for more information on these operations.

1.6 Installation Procedure Requirements

The following subsections discuss various requirements for installing VAX VTX.

1.6.1 Media

VAX VTX ships on either one TK50 or one magtape, depending on your system configuration.

1.6.2 Time

The installation takes approximately 20 minutes to 4 hours 20 minutes, depending on the type of media you are using and your system configuration.

Installing the complete VAX VTX kit, including the TCP sources, and running the IVP on a standalone VAX 8820 system takes 20 minutes.

1.6.3 Privileges

To install VAX VTX, you must log into an account that has SETPRV or an account with at least the following privileges:

CMKRNL
WORLD
SYSPRV
SYSNAM
GROUP
GRPNAM
NETMBX
TMPMBX

NOTE

VMSINSTAL turns off the BYPASS privilege at the start of the installation.

1.6.4 Disk Space

Installing VAX VTX requires a certain amount of free storage disk space during the installation. After you install VAX VTX, the product requires less storage space. Table 1–1 summarizes the storage requirements for each of the VAX VTX installation options.

Table 1–1: Disk Space Requirements

Kit	Blocks During Installation	Blocks After Installation
Subscriber Interface only	10800	4700
Full VAX VTX kit	21500	8700
Full VAX VTX kit with TCP source code	41000	22000

For additional information on the TCP source code option, see the *Installing the TCP source code* part of step 5 in Section 2.2.2.

If you choose to do the conversational installation, the following disk space is needed:

- Front-End only (4700 blocks)
- Information Provider Tools (2200 blocks)
- Information Provider Conversion Tools (200 blocks)
- VTX Servers (1000 blocks)
- VAS and ELK (600 blocks)
- TCP source code (13000 blocks)

To determine the number of free disk blocks on the current system disk, enter the following command at the DCL prompt:

```
$ SHOW DEVICE SYS$SYSDEVICE  Return
```

1.6.5 System Parameters

Installing VAX VTX requires certain system parameters. The following subsections describe the system parameters that you may need to update.

1.6.5.1 VIRTUALPAGECNT

This must be set to at least **35,000** on your system. Please refer to Section 1.6.6.1 for information on how to verify and update a system parameter.

1.6.5.2 CTLPAGES

The process from which you plan to install VTX must have at least **42** free CTLPAGES. You can verify the number of free CTLPAGES by issuing the following command at the DCL prompt:

```
$  SHOW PROCESS/MEMORY Return
```

The following information is displayed:

```
26-APR-1990 11:23:25.55  User: USER1      Process ID:   27C004E5
                         Node: NODE1      Process name: "USER1_8"
Process Dynamic Memory Area
   Current Size (bytes)      768000   Current Total Size (pages)  1500
   Free Space (bytes)        755736   Space in Use (bytes)       12264
   Size of Largest Block     755664   Size of Smallest Block        24
   Number of Free Blocks          3   Free Blocks LEQU 32 Bytes      1
```

The value of interest is "Free Space". In the example shown, the process has 755736 bytes free which is equivalent to 755736/512 = 1476 full pages. If you have 42 or more free pages (21504 bytes) you do not need to change anything. If you have less than 42 free pages, you need to increase the value of your CTLPAGES. The value you need on your CTLPAGES is:

((Your_free_space + 511) / 512) + 42.

Refer to Section 1.6.6.2 for information on how to update a system parameter.

IF YOUR CTLPAGES IS VERY CLOSE TO THE REQUIRED VALUE

CTLPAGES are used, for example, when defining process logical names. If you are close to the required value, log in to a new process and verify your free CTLPAGES. If the value from the new process is also close to the required value, you should perform the installation from a new process.

1.6.6 GBLPAGES and GBLSECTIONS

The installation updates your DCLTABLES and requires at least **n + 40** free GBLPAGES, where **n** is the size of your DCLTABLES.EXE which you can display by typing:

```
$  DIRECTORY/SIZE SYS$SHARE:DCLTABLES.EXE Return
```

In the following example, the value of **n** is 786. Therefore, you need at least 786 + 40 = 826 GBLPAGES free. You will also need at least **1** GBLSECTIONS free.

```
Directory SYS$COMMON:[SYSLIB]

DCLTABLES.EXE;439       786

Total of 1 file, 786 blocks.
```

The GBLPAGES and GBLSECTIONS parameters can be checked with the INSTALL utility. In the following example, there are 19690 free GBLPAGES:

```
$  INSTALL LIST /GLOBAL /SUMMARY Return

    Summary of Local Memory Global Sections

    380 Global Sections Used,  35310/19690 Global Pages Used/Unused
$
```

Use the SYSGEN utility (see Section 1.6.6.1) to verify that the GBLSECTIONS value is sufficient; that is, GBLSECTIONS is at least 1 greater than the value shown for Global Sections Used.

1.6.6.1 Checking System Parameter Values

To check the values of your system parameters, invoke the System Generation Utility by entering the following command at the DCL prompt:

```
$  RUN SYS$SYSTEM:SYSGEN Return
SYSGEN>
```

At the SYSGEN> prompt, enter the SHOW command to display the value of a system parameter. The values the SHOW command displays should equal or exceed the value of the parameter listed in Section 1.6.5.1. The following command displays the value for the VIRTUALPAGECNT system parameter:

```
SYSGEN>  SHOW VIRTUALPAGECNT Return
```

After you check the VIRTUALPAGECNT parameter with the SHOW command, enter the EXIT command at the SYSGEN> prompt to return to DCL level.

1.6.6.2 Changing System Parameter Values with AUTOGEN

You use the AUTOGEN command procedure to change system parameters. AUTOGEN automatically adjusts values for parameters that are associated with the ones you reset manually. To change system parameters with AUTOGEN, you must edit the following file:

```
SYS$SYSTEM:MODPARAMS.DAT
```

Use an editor to access the file. If you need to change a parameter value in the SYS$SYSTEM:MODPARAMS.DAT file, delete the current value associated with that parameter and enter the new value.

To add a new value, add a line to the MODPARAMS.DAT file. The line contains the name of the parameter and its value. For example:

```
WSMAX = 1024
```

You can also modify incremental parameters in the MODPARAMS.DAT file. The following example increases the global page setting by 2000:

```
ADD_GBLPAGES = 2000
```

After you complete all your changes, run the AUTOGEN procedure to recalculate your system parameters. Enter the following command at the DCL prompt:

```
$ @SYS$UPDATE:AUTOGEN GETDATA REBOOT Return
```

AUTOGEN performs an automatic system shutdown and then reboots your system. Rebooting your system activates the new parameter values.

When you reboot a system under VMS Version 5.0, the Autogen Utility automatically adjusts some of the SYSGEN parameters based on the consumption of resources since the last reboot. If you do not want to take advantage of this automatic adjustment, include the NOFEEDBACK qualifier on the AUTOGEN command line.

For more information about using AUTOGEN, see the instructions on modifying system parameters in the documentation on the VMS System Management Subkit.

1.6.7 Page File Quota

You must provide a value of at least 35,000 for the process parameter PGFLQUO (page file quota). To check the current value of PGFLQUO, type the following:

```
$ SHOW PROCESS/ALL Return
```

The item *Paging file quota:* shows the value of PGFLQUO. If the value is below 35,000, run the Authorize Utility to modify it. For example:

```
$  RUN SYS$SYSTEM:AUTHORIZE Return
UAF>  MODIFY OPER/PGFLQUO=35000 Return
```

Substitute the name of the account from which you are installing VTX for OPER.

You can change the quota even though you are logged into the account.

NOTE

You must log out and log back in again for the quota to become active.

1.6.8 Process Account Quotas

The account you use to install VAX VTX must have sufficient quotas to enable you to perform the installation. Table 1–2 summarizes the process quotas VAX VTX requires for the installation account.

Table 1–2: Process Account Quotas for the Installing Account

Account Quota	Value
ASTLM	240
BIOLM	230
BYTLM	65,000
DIOLM	50
ENQLM	300
FILLM	200
PGFLQUO	35,000
TQELM	20

VMS stores user account quotas in the file SYSUAF.DAT. Use the VMS Authorize Utility to verify and change user account quotas. First set your directory to SYS$SYSTEM and then run AUTHORIZE.

```
$  SET DEFAULT SYS$SYSTEM Return
$  RUN AUTHORIZE Return
UAF>
```

At the Authorize Utility prompt (UAF>), use the SHOW command with an account name to check a particular account. For example:

```
UAF>  SHOW SMITH  Return
```

To change a quota, use the MODIFY command at the UAF> prompt. MODIFY has the following format:

```
MODIFY account-name /quota-name=NNN
```

The following example changes the FILLM quota for the SMITH account and then exits from the Authorize Utility:

```
UAF>  MODIFY SMITH /FILLM=50  Return
UAF>  EXIT  Return
```

After you exit from the utility, the VMS system displays messages indicating whether or not changes were made. After you make the changes, you must log out and log in again to enable the new quotas.

For more information on modifying account quotas, see the description of the Authorize Utility in the VMS documentation set.

1.6.9 VMSINSTAL Requirements

Before you invoke VMSINSTAL, you should complete the following steps:

1. Log into a privileged account
2. Set your default device and directory to SYS$UPDATE
3. Ensure the system has adequate quotas for installation

When you invoke VMSINSTAL, the procedure first checks to be sure you meet these requirements and then displays the following information:

- Whether DECnet is up and running on the system
- Which, if any, users are logged into the system

Some software products may require you to disconnect DECnet before you begin an installation. You can install VAX VTX whether or not DECnet is running. However, DECnet *must* be running to use the Installation Verification Procedure (IVP).

You can install VAX VTX when users are logged into the system, although the installation could fail if a user and the VAX VTX installation procedure try to access a file at the same time. Therefore, you should have all users log off the system to ensure that the installation does not fail.

If VMSINSTAL detects a problem during the installation, it notifies you and asks if you want to continue the installation. In some instances, you can enter YES to continue. To stop the installation process and correct the situation, enter NO or press RETURN, then correct the problem and restart the installation.

1.6.10 Backing Up Your System Disk

At the beginning of the installation, VMSINSTAL asks if you have backed up your system disk. Digital recommends that you do a system disk backup before installing any software in addition to the operating system.

Use the backup procedures that have been established at your site. For details on performing a system disk backup, see the section on the Backup Utility in the VMS documentation set.

1.6.11 VAX VTX Requirements

VAX VTX checks for the following conditions during the installation procedure:

- VMS Version 5.3 (or higher) is running on the system
- The appropriate number of free blocks are available on the system disk (required for a complete installation)
- System parameters and account quotas meet required minimums

See the documentation on the VMS System Management Subkit for more information.

1.6.12 IVP Requirements

Before you run the Installation Verification Procedure (IVP) as part of the VAX VTX installation or separately, you must stop all VTX, Workbench, and Update Servers, as well as all VAS run-time images. The VAX VTX Version 4.1 IVP starts servers using the default object numbers and could fail if these numbers are already being used.

1.6.13 The VAX VTX VISTA Utility

For VAX VTX Version 4.0, the VISTA Utility was enhanced and renamed the VAX VTX Workbench. The VISTA menu structure files that were created with VTX Version 3.1 are not compatible with the Workbench Utility in VAX VTX Version 4.0 or Version 4.1.

If you are upgrading directly from Version 3.1 to Version 4.1 and you want to do additional work on menu structures saved in Version 3.1 files (menu structure files named structurename_MENUSTR.VTX in your VTX$VISTA subdirectory), follow the steps listed below:

1. Update your infobase with the menu structures *before* you install VAX VTX Version 4.1
2. After you install VAX VTX Version 4.1, convert your VISTA library files to Workbench library files (see the *VAX VTX Operator's Guide* for information on the conversion process)
3. Use the LOCATE option (provided through the Workbench interactive graphical interface, WBGI) to recreate the menu structure
4. Save the menu structure to a Version 4.1 menu structure file

If you fail to follow this procedure, you will receive an error message when you try to open Version 3.1 menu structure files.

For additional information on the Workbench Utility, see the online release notes.

1.6.14 Converting Previous VTX Files to VAX VTX Version 4.0 Format

If you used a version of VTX prior to installing VAX VTX Version 4.0, you must convert certain files to Version 4.0 format. See the *VAX VTX Operator's Guide* for more information on page file conversion using the VTXPFC utility. If you used VTX prior to Version 4.0, you should review the conversion procedures carefully before you install VAX VTX.

Chapter 2

Installing VAX VTX

This chapter describes how to install VAX VTX. Section 2.2 contains a step-by-step description of the installation procedure.

2.1 General Information

This section includes information about accessing release notes, determining files and logical names added to your system, running the Installation Verification Procedure (IVP), and aborting the installation. It also describes how to install the MS-DOS Terminal Control Program (TCP) on a Personal Computer.

2.1.1 Accessing the Online Release Notes

VAX VTX provides online release notes. You must specify OPTIONS N when you invoke VMSINSTAL to access the release notes. VMSINSTAL provides a list of options near the beginning of the installation that allows you to decide how you want to view the release notes during the installation.

You should review the release notes in case they contain any information about changes in the installation procedure. If you are restarting the installation procedure and you have already reviewed the release notes, you do not need to specify OPTIONS N.

After you install VAX VTX, your system stores the release notes in the following file:

```
SYS$HELP:VTX041.RELEASE_NOTES
```

2.1.2 Running the Installation Verification Procedure (IVP)

The Installation Verification Procedure (IVP) for VAX VTX verifies the installation. When you install VAX VTX, the VMSINSTAL procedure asks you if you want to run the IVP as part of the installation. If you respond YES, VMSINSTAL runs the IVP.

There are three different IVPs for VAX VTX. The IVP you run depends on the installation option you choose. The VTX full kit installation option requires a two-part IVP. See the instructions in Chapter 4 to determine the IVP you need to run and whether you need to execute a second part of the IVP after you complete the installation.

After you install VAX VTX, you can run the IVP independently to verify that the software is available on your system. You can also run the IVP after a system failure to be sure that users can access VAX VTX.

See Chapter 4 for more detailed information on the IVP.

2.1.3 Aborting the Installation

You can abort the installation procedure at any time by pressing CTRL/Y. When you press CTRL/Y, the installation procedure deletes all files it creates up to that point and exits. You can then restart the installation.

2.2 The Installation Procedure

The VAX VTX installation procedure consists of a series of questions and informational messages.

2.2.1 Invoking VMSINSTAL

To start the installation, invoke the VMSINSTAL command procedure from a privileged account, such as the SYSTEM account. VMSINSTAL is in the SYS$UPDATE directory. Use the following syntax to invoke VMSINSTAL:

```
@SYS$UPDATE:VMSINSTAL product-name device-name OPTIONS N
```

product-name

The installation name for the component. For VAX VTX, use the following installation name:

```
VTX041
```

device-name

The name of the device on which you plan to mount the media. For example, MTA0: is the device name for a tape drive. It is not necessary to use the console drive for this installation. However, if you do use the console drive, you should replace any media you remove once you complete the installation.

OPTIONS N

An optional parameter that gives you the option of accessing the release notes during the installation. If you do not include the OPTIONS N parameter, VMSINSTAL does not provide this option. You should always review the release notes before you proceed with the installation in case they contain new information about the installation.

Note that there are several other options you can select when you invoke VMSINSTAL. See the VMS documentation on software installation for information on these options.

The following example displays the command you use to invoke VMSINSTAL to install VAX VTX from tape drive MTA0: and shows the system response. This example uses the OPTIONS N release note parameter.

```
$  @SYS$UPDATE:VMSINSTAL VTX041 POLO$MUA6: Return

      VAX/VMS Software Product Installation Procedure V5.3


It is 14-APR-1990 at 11:55.
Enter a question mark (?) at any time for help.
```

If you do not supply either the product name or the device name, VMSINSTAL prompts you for this information later in the installation procedure. Because VMSINSTAL does not prompt for options, be sure to include OPTIONS N on the VMSINSTAL command line if you want to access the release notes during the installation.

2.2.2 Installation Questions

This section describes the questions that appear during the installation. Appendix A contains a sample installation procedure that explains how to answer the questions.

VMSINSTAL marks each question in the installation with an asterisk (*) at the beginning of the line. Some questions show the default response in brackets, for example [YES]. To use the default response, press the RETURN key.

The following list outlines the steps in the installation procedure:

1. DECnet status

   VMSINSTAL displays a list of all active processes on the system and tells you whether your DECnet network is running. It then asks if you want to continue the installation. You should install VAX VTX on a standalone system or cluster with your DECnet network shut down. NO is the default response to the question.

```
%VMSINSTAL-W-DECNET, Your DECnet network is up and running.
   .
   .
   .
* Do you want to continue anyway [NO]?
```

2. System backup

   VMSINSTAL asks if you are satisfied with your system backup. You should always back up your system disk before performing an installation. If you are satisfied with the backup of your system disk, press RETURN. Otherwise, enter NO to discontinue the installation. After you back up your system disk, you can restart the installation.

```
* Are you satisfied with the backup of your system disk [YES]?
```

3. Release notes

   If you specify OPTIONS N when you invoke VMSINSTAL, the procedure now asks you to choose one of the five options for reviewing the release notes.

```
Release Notes Options:

 1.  Display release notes
 2.  Print release notes
 3.  Both 1 and 2
 4.  Copy release notes to SYS$HELP
 5.  Do not display, print or copy release notes

* Select option [2]:
```

The following list describes each selection and its corresponding result:

- Option 1

  VMSINSTAL displays the release notes immediately on the console terminal. You can terminate the display at any time by pressing CTRL/C.

  If you choose this option, VMSINSTAL copies the release notes to the SYS$HELP directory.

- Option 2

  VMSINSTAL prompts you for the name of the print queue that you want to use:

  ```
  * Queue name [SYS$PRINT]:
  ```

  Press RETURN to send the file to the default output print device or enter another queue name.

  This option also prompts VMSINSTAL to copy the release notes to the SYS$HELP directory.

- Option 3

  VMSINSTAL displays the release notes immediately on the console terminal and then prompts you for a queue name for the printed version.

  This option also prompts VMSINSTAL to copy the release notes to the SYS$HELP directory.

- Option 4

  VMSINSTAL copies the release notes to the help directory.

- Option 5

  VMSINSTAL takes no action. Select this option if you have already reviewed the release notes and are restarting the installation.

NOTE

For a typical installation, you should select either option 2 or option 4.

4. Continuing the installation

   The installation procedure now asks if you want to continue the installation. To continue, enter YES. Otherwise, press RETURN.

   In either case, VMSINSTAL copies the release notes to a file in the SYS$HELP directory. For example:

```
* Do you want to continue the installation [N]?:  YES
%VMSINSTAL-I-RELMOVED, The product's release notes have been
    successfully moved to SYS$HELP.
```

   VMSINSTAL copies the release notes to the following file:

```
SYS$HELP:VTX041.RELEASE_NOTES
```

NOTE

The name of the release notes file installed by VMSINSTAL consists of the current product name and version number. Do not delete the release notes for previous versions of VAX VTX.

5. Selecting VAX VTX components

   VMSINSTAL gives you the option of installing the entire kit, or just the kits or components you require. You can also exit the installation procedure.

```
1) Install Subscriber interface only

2) Conversational installation

3) Install Full VTX kit

4) Install Full VTX kit with TCP source code

5) Exit from the installation procedure

* Enter option [2]:
```

   The default is option 2 which is the conversational mode of VTX installation. You are asked to select the VTX options that you want to install.

   Depending on the option you select, the following installation takes place:

   - Selecting Subscriber Interface only (option 1)

     If you select option 1 from the installation menu, only the Subscriber environment is installed on your system. See the first item under the installation procedure for a conversational installation for details of the component parts of the Subscriber interface.

- Selecting Conversational Installation (option 2)

  If you choose to do a conversational installation, you are prompted whether or not you want to install each part of the full VTX kit.

  * Installing the Subscriber environment

    You have the option to install the VTX Subscriber environment which includes the following parts:

VTXPAD	Subscriber's interface for VTX
VTXCON	Concentrator for VTX Subscriber sessions
MSDOS	Subscriber's interface to VTX for MS-DOS (reference kit)

    The Subscriber environment is installed if you enter YES in response to the question:

    ```
    * Would you like to install the VTX Subscriber environment
      [YES]?
    ```

  * Installing the Information Provider tools

    You have the option to install the Information Provider tools which are required if you want to update a VTX infobase. This option requires that the Subscriber environment is installed.

    ```
    * Would you like to install the VTX Information Provider tools
      [YES]?
    ```

  * Installing the VTX V3.x IP conversion tools

    A few file formats for Information Provider tools changed between VTX V3.x and V4.0; to upgrade your V3.x files you need the following components:

PFC	The Page File Conversion tool
VLC	Converts a VISTA library to a Workbench library
IAF	Converts an APMS Index

    NOTE

    No file conversions are needed if you go from VTX V4.0 to V4.1.

    If you need to convert your VTX V3.x files, answer YES to the question, otherwise NO:

    ```
    * Would you like to install VTX V3.x IP Conversion tools [YES]?
    ```

* Installing the VTX Servers

  You have the option to install the VTX Server environment which has the following parts:

SRV	Allows local and remote VTX Subscribers to access a VTX infobase on this system.
UPDSRV	Allows remote VTX Information Providers to update VTX infobases on this system.
WBSRV	Allows remote VTX Information Providers to access Workbench libraries on this system.
ACU	VTX infobase access Authorization and Accounting utility.

  To install the Server environment, answer YES to the following question:

```
* Would you like to install the VTX Servers [YES] ?
```

* Installing the VTX Back-End environment.

  VTX Back-End applications are programs that are started when a subscriber references a page in a VTX infobase. This option includes the following parts:

VAS	A high-level programming interface for writing VTX Back-End applications.
ELK	A low-level programming interface to writing VTX Back-End applications.

  Both the components include their programming interfaces and can be installed by answering YES to the following question"

```
* Would you like to install the VTX Back End environment [YES] ?
```

* Installing the TCP source code

  The VTX Subscriber interface can be customized by modifying the source code. Refer to your VTX Warranty Exclusion for details on what can be changed without violating your standard VTX support contract.

  NOTE

  You need access to a BLISS32 compiler in order to compile any changes that you make.

  If you want this option, answer YES to the following question:

```
* Would you like to install the TCP source code [NO] ?
```

  You are then asked where you want the TCP source files to be put. You must specify a directory in response to the following question:

```
* Where do you want the TCP sources [SYS$SYSROOT:TCPLIB]:
```

* Installing the Common keypad

  The Common keypad is a superset of the traditional VTX default keypad and the ALL-IN-1 keypad except where there are conflicting mappings. Refer to the *VAX VTX Subscriber's Booklet* for more details of the Common keypad.

  If you want to use the Common keypad, answer YES to the following question:

```
* Would you like to install the new keypad [NO]?
```

- Selecting to install the full VTX kit (option 3)

  If you select option 3 from the installation menu, the full VAX VTX kit is installed on your system. The full VTX kit consists of:

  * Subscriber environment
  * Information Provider tools
  * Information Provider Conversion tools
  * VTX Servers

  See the conversational installation for details of installing these components.

- Selecting to install the full VTX kit with TCP source code (option 4)

  If you select option 4 from the installation menu, the full VTX kit plus the TCP source code is installed on your system as follows:

  * Subscriber environment
  * Information Provider tools
  * Information Provider Conversion tools
  * VTX Servers

  See the conversational installation for details of installing these components.

- Selecting to exit from the installation procedure (option 5)

  If you select option 5 from the installation menu, you exit from the installation procedure without installing anything on your system.

6. Choosing to purge files

   You have the option to purge files from previous versions of VAX VTX that are superseded by this installation. Purging is recommended; however, if you need to keep files from the previous version, enter NO in response to the question.

   ```
   * Do you want to purge files replaced by this installation [YES]?
   ```

7. Deleting obsolete files

   The installation procedure asks you if you want to delete all files made obsolete by this installation. The default answer is NO. To delete the obsolete files, answer YES.

   Table 2–1 provides a list of the files made obsolete by the installation.

Table 2–1: Files Made Obsolete by Installation Procedure

	Directory and Filename
	SYS$COMMON:[SYSLIB]VTX$TERMSHR.EXE
	SYS$HELP:VTXCTLVSRV.HLB
	SYS$LIBRARY:VTXIAF.FDL
	SYS$LIBRARY:VTXIAF_CONVERT.CLD
	SYS$LIBRARY:VTXKFC.FDL
	SYS$LIBRARY:VTXPAF.FDL

(continued on next page)

Table 2–1 (Cont.): Files Made Obsolete by Installation Procedure

Directory and Filename
SYS$LIBRARY:VTXPAF_CONVERT.CLD
SYS$SYSROOT:[RUSLLIB]RUSLLIB.OLB
SYS$SYSROOT:[SYSTEST]VTX$IVP_UPDATE.COM
SYS$SYSROOT:[SYSTEST]VTX$IVP_VAS.COM
SYS$SYSTEM:VASCTL.EXE
SYS$SYSTEM:VTXIAF_CONVERT.EXE
SYS$SYSTEM:VTXKFC.EXE
SYS$SYSTEM:VTXPAF_CONVERT.EXE
SYS$SYSTEM:VTXVISTA.EXE
SYS$SYSTEM:VTXVISTASRV.EXE
SYS$UPDATE:SAMPLE_STYLE.VTX
SYS$UPDATE:VTXBASE.TXT
SYS$UPDATE:VTXCON.COM
SYS$UPDATE:VTXIAF_CONVERT.COM
SYS$UPDATE:VTXMAIN.VTU
SYS$UPDATE:VTXPAF_CONVERT.COM
SYS$UPDATE:VTXSERVER.COM
SYS$UPDATE:VTXUPDSRV.COM
SYS$UPDATE:VTXVISASRV.COM
SYS$UPDATE:VTX_INTERNALS.VTU
VTX$TCPLIB:CON.OLB
VTX$TCPLIB:DECTERMLIB.OLB
VTX$TCPLIB:DSLLIB.OLB
VTX$TCPLIB:NOREGISLIB.OLB
VTX$TCPLIB:STRINGS.OBJ
VTX$TCPLIB:VTXCON.OPT
VTX$TCPLIB:VTXCTLCMD.OBJ
VTX$TCPLIB:VTXPAD.OPT

8. Choosing to run the Installation Verification Procedure (IVP)

   The installation procedure now asks if you want to run the Installation Verification Procedure (IVP), which checks that the installation is successful.

```
* Do you want to run the IVP after the installation [YES]?
```

   It is recommended that you run the IVP. See Chapter 4 for information on how to do this.

2.2.3 Informational Messages

At this point, there are no further questions. The installation procedure displays a number of informational messages that report on the progress of the installation.

For example, VMSINSTAL notifies you that it is restoring various savesets, building command and message files, and creating system and component libraries.

If the installation procedure is successful up to this point, VMSINSTAL moves the new or modified files to their target directories, updates help files, and updates DCL tables, if necessary. If you asked for files to be purged, that work is done now. VMSINSTAL displays the following message:

```
%VMSINSTAL-I-MOVEFILES, files will be moved to their target directories...
```

2.2.4 Running the Installation Verification Procedure

If you chose to run the IVP, VMSINSTAL runs it now. When the IVP runs successfully, you see the following message:

```
    * * * * *  S U C C E S S  * * * * *

  VAX VTX V4.1 IVP completed successfully

    * * * * *  S U C C E S S  * * * * *
```

2.2.5 Completing the Installation Procedure

The following messages indicate that the entire installation procedure is complete:

```
Installation of VTX V4.1 completed at 10:16

VMSINSTAL procedure done at 10:17
```

When the optional portion of the VAX VTX IVP is completed, you must stop the servers. To so so, follow these steps:

1. Run the VTXCTL Utility using the following command:

   ```
   $  Run SYS$SYSTEM:VTXCTL  Return
   ```

2. Type the STOP commands and the EXIT command at the CTL> prompt; for example:

   ```
   CTL>  STOP SERVER/NAME=IVP  Return
   CTL>  STOP VAS/NAME=IVP  Return
   CTL>  EXIT  Return
   $
   ```

You can now log out of the privileged account:

```
$  LOGOUT  Return
SYSTEM     logged out at 20-APR-1990 10:44:00.00
```

Note that VMSINSTAL deletes or changes entries in the process symbol tables during the installation. Therefore, if you are going to continue using the system manager's account and you want to restore these symbols, you should log out and log in again.

2.3 Installing the MS-DOS TCP on Your Personal Computer

If you want to access VAX VTX on a PC running MS-DOS, you must have the MS-DOS Terminal Control Program (TCP) installed on the PC. To install the MS-DOS TCP on your PC:

- You must be a DECnet node and have DECnet running. You need access to two VMS systems: the VMS system you install the kit from, which needs to access SYS$COMMON:[VTX$LIBRARY], and the system that runs your home server which only needs to be defined, as follows:

  ```
  C:> NCP DEFINE node area.nodenum name nodename
  ```

  You can define the VMS system for your home server after the installation if you prefer.

- You must have write access to the destination disk on your PC.
- You must have 125KB free on the destination disk.
- Copy the installation (.BAT) file and program from the VMS system by typing the following command:

```
C:>  NFT COPY node::SYS$COMMON:[vtx$library]:vtxdosin.bat,
     vtxdosq.exe *.*
```

  The following messages will be displayed:

```
Copying file: nodename::SYS$COMMON:[vtx$library]:vtxdosin.bat to
C:\VTX\vtxdosin.bat  [n bytes at m bytes/second]

Copying file: nodename::SYS$COMMON:[vtx$library]:vtxdosq.exe to
C:\VTX\vtxdosq.exe  [n bytes at m bytes/second]
```

- Execute the .BAT file by typing the following command:

```
C:>  vtxdosin
```

  You are now prompted for some information: you must specify the destination disk and nodename, otherwise you may take all the default responses if they meet your requirements. The default responses appear in brackets.

The installation procedure creates two files of interest in the VTX library: the VTXENV.BAT file and the VTX.SYS (configuration) file.

The VTXENV.BAT file defines the environment variable VTXLIB which points to the VTX library.

NOTE

The VTXENV.BAT file should be called or executed from your AUTOEXEC.BAT file at boot time.

Also, the VTXENV.BAT file contains the command to add the VTX library to your search path. If you need to move the VTX library to a different disk, you must edit the VTXENV.BAT file to point to the new location and change the command in your AUTOEXEC.BAT file that calls the VTXENV.BAT file.

The VTX.SYS file specifies parameters to the TCP such as the server to connect to, and the language, protocol and keypad to be used. You should edit this file if your default server name or object number changes or if you want to access the server with a different language or protocol.

The following items are in the configuration (VTX.SYS) file:

```
SERVER=node_name
OBJECT=n
PROTOCOL=valid-vtx-protocol
LANGUAGE=valid-vtx-language
DEVICE_TYPE=valid-vtx-device-type
KEYPAD={NUMERIC|APPLICATION}
KEYBOARD={EPC|AT|XT|LK250}
```

where:

- *node_name* is the DECnet node name of the server, without trailing colons
- *n* is the DECnet object number of the server
- *valid-vtx-protocol* defaults to ASCII
- *valid-vtx-language* defaults to ENGLISH
- *valid-vtx-device-type* defaults to IBMPC
- KEYPAD defaults to APPLICATION
- KEYBOARD can be explicitly set, although the MS-DOS TCP tries to determine which type of keyboard is being used. The default value is EPC.

NOTE

In a PCSA environment, when one disk can be shared by many PCs, you do not need to install VAX VTX on each PC. Simply install the VTX MS-DOS TCP on one PC, which must have write access to the destination disk during installation. Then add the VTXENV file to the AUTOEXE.BAT file of each PC that will be sharing the disk that has the MS-DOS TCP installed.

The following is a sample MS-DOS TCP installation:

```
C> vtxdosin

=========================================================================
|                                                                       |
|              VTX V4.1 Installation Procedure for MS-DOS               |
| Copyright 1986, 1987, 1988, 1989, 1990 Digital Equipment Corporation  |
|                                                                       |
=========================================================================

What disk would you like to copy the VTX kit to? >>

What VMS node is the VTX kit located on? >> vax1

What is the node name of your home server? >> vax2

What is the object number of your home server? [43] >> 143

What keypad would you like to use? [NUMERIC] >>

What language would you like to connect as? [ENGLISH] >>
Creating VTX directory...
Copying file: vax1::sys$common:[vtx$library]vtx$pchlpat.txt to
C:\VTX\vtxhlpat.txt  [9450 bytes at m bytes/second]
Copying file: vax1::sys$common:[vtx$library]vtx$pchlpatap.txt to
C:\VTX\vtxhlpatap.txt  [9450 bytes at m bytes/second]
Copying file: vax1::sys$common:[vtx$library]vtx$pchlpxt.txt to
C:\VTX\vtxhlpxt.txt  [9458 bytes at m bytes/second]
Copying file: vax1::sys$common:[vtx$library]vtx$pchlplk.txt to
C:\VTX\vtxhlpxtap.txt  [9458 bytes at m bytes/second]
Copying file: vax1::sys$common:[vtx$library]vtx$pchlplk.txt to
C:\VTX\vtxhlplk.txt  [9845 bytes at m bytes/second]
Copying file: vax1::sys$common:[vtx$library]vtx$pchlplkap.txt to
C:\VTX\vtxhlplkap.txt  [9845 bytes at m bytes/second]
Copying file: vax1::sys$common:[vtx$library]vtx$pchlpep.txt to
C:\VTX\vtxhlpep.txt  [9510 bytes at m bytes/second]
Copying file: vax1::sys$common:[vtx$library]vtx$pchlpepap.txt to
C:\VTX\vtxhlpepap.txt  [9510 bytes at m bytes/second]
Copying file: vax1::sys$common:[vtx$library]vtx$dostcp.exe to
C:\VTX\vtx.exe [89472 bytes at m bytes/second]
     1 File(s) copied
     1 File(s) copied

    NOTE: Append the execution of the file \VTX\VTXENV.BAT in
          your VTX library directory on the target disk to your
          autoexec.bat and reboot to use VTX.

=========================================================================
|                                                                       |
|                End of VTX V4.1 Installation                           |
|                                                                       |
=========================================================================
```

2.4 Error Recovery

If errors occur during the installation procedure or when the IVP is running, VMSINSTAL displays failure messages. If the installation fails, you see the following message:

```
%VMSINSTAL-E-INSFAIL, The installation of VTX V4.1 has failed.
```

If the IVP fails, you see these messages:

```
The VTX V4.1 Installation Verification Procedure failed.

%VMSINSTAL-E-IVPFAIL, The IVP for VTX V4.1 has failed.
```

Errors can occur during the installation if any of the following conditions exist:

- The operating system version is incorrect
- A prerequisite software version is incorrect
- Quotas necessary for successful installation are insufficient
- System parameter values for successful installation are insufficient
- The VMS help library is currently in use
- The product license is not registered and loaded

For descriptions of the error messages generated by these conditions, see the VMS documentation on system messages, recovery procedures, and VMS software installation. If you are notified that any of these conditions exist, you should take the appropriate action as described in the message. You might need to change a system parameter or increase an authorized quota value. For information on installation requirements, see Chapter 1.

Chapter 3

After Installing VAX VTX

After installing VAX VTX, you need to perform the following tasks:

- Edit the system startup file to establish a VTX print queue
- Start VAX VTX on other nodes in your VAXcluster
- Set subscriber account privileges and quotas
- Define the appropriate system logicals
- Set up DECnet
- Create a VTX operator's account

This chapter also describes how to use search lists.

3.1 Establishing a VAX VTX Print Queue

To establish a VAX VTX print queue, you must modify your system startup file. There is no automatic startup procedure for VAX VTX; however, if you want to use an editor to create VAX VTX documents, you must edit the system startup file to provide for automatic startup of the VAX VTX print queue when you reboot your system.

3.1.1 Editing the System Startup File

Add the command line that starts the VAX VTX print queue to the system startup file, SYS$MANAGER:SYSTARTUP_V5.COM. The following example displays the network startup command line followed by the startup command line for the VAX VTX print queue:

```
$  @SYS$MANAGER:STARTNET.COM
      .
      .
      .
$  @SYS$STARTUP:VTXWPS_STARTUP.COM
```

Place the command line to start the VAX VTX print queue in the system startup file at a position that meets the requirements of your site.

NOTE

If you create an automatic startup procedure for VAX VTX, you must add the command line that starts that procedure to the system startup file after the *@SYS$MANAGER:STARTNET.COM* command line entry. However, it does not have to be after the *@SYS$STARTUP:VTXWPS_STARTUP.COM* command line entry.

3.1.2 Configuring Print Tables for VTX$QUEUE

To use WPS-PLUS with VTX$QUEUE, you must configure the WPS-PLUS or ALL-IN-1 print tables so that WPS-PLUS recognizes VTX$QUEUE. This subsection describes how to configure print tables for VTX$QUEUE if your system is running WPS-PLUS Version 3.1 under ALL-IN-1 Version 2.3 or as a standalone.

If you are running WPS-PLUS Version 3.1 under ALL-IN-1 Version 2.3, follow these steps to configure print tables for VTX$QUEUE:

1. Log in to a privileged account, preferably SYSTEM.
2. Locate the device on which the [ALLIN1] directory is located.
3. Copy the files VTX.PRA and VTX.PRC from SYS$COMMON:[VTX$LIBRARY] to the directory DEVICE:[ALLIN1.PRINT].
4. Log in to the ALL-IN-1 manager's account.
5. Establish the VTX print table in ALL-IN-1:
   - Select the menu option MPR (Manage printers). ALL-IN-1 displays the two options of the Manage Printers menu, PR and PT.
   - Select menu option PT (Printer types). ALL-IN-1 displays the Manage Printer Types menu.
   - Select menu option C (Create). ALL-IN-1 displays the following form. Fill in the information listed to the right of each field as it appears below. Be sure to leave the last field (Print Form:) blank.

```
Printer Type:            VTX
Foreground function:     DO WPPSYSTEM
Background function:     DO WPPBGFORMAT
Printer Device:          VTX
Print Form:
```

- Return to the Manage Printers menu.
- Select the Manage Printers menu option PR (Site printers). ALL-IN-1 displays Manage Site Printers menu.
- Select the SEL menu option. ALL-IN-1 prompts you for a name. Enter VTX$QUEUE and press the RETURN key.
- If ALL-IN-1 cannot find VTX$QUEUE, select menu option C (Create).
- If ALL-IN-1 finds VTX$QUEUE, select menu option E (Edit).
- Whether you select menu option C or E, ALL-IN-1 displays the following form. If the form is blank, fill in the fields with the information listed to the right of each field. If the fields contain information that differs from the information seen below, edit the form and change the appropriate fields to those listed below.

```
Printer Name:                VTX$QUEUE
Description:                 Format document and send to VTX
Format Printer Type:         VTX
Destination Printer Type:    VTX
Print Queue:                 VTX$QUEUE
```

If you are running WPS-PLUS Version 3.1 in a standalone environment, follow these steps to configure print tables for VTX$QUEUE:

1. Log in to a privileged account, preferably SYSMGR.
2. Locate the device on which the [WPSPLUS] directory is located.
3. Copy the files VTX.PRA and VTX.PRC from SYS$COMMON:[VTX$LIBRARY] to the directory DEVICE:[WPSPLUS.PRINT].

3.1.3 DCLTABLES

This version of VTX contains slight changes to the DCL command. Please refer to the *VAX VTX Subscriber's Booklet* for details of the new COMMON device type.

NOTE

If you are in a VAX Cluster, you must re-install DCLTABLES on all nodes in the cluster except the node that you performed the installation from.

Failure to re-install DCLTABLES will cause the following error message to be displayed:

```
%CLI-F-SYNTAX, error parsing 'PIC1'
-CLI-E-ENTNF, specified entity not found in command tables
```

In addition to this error, VTXPAD will refuse to start.

You can reinstall DCLTABLES with the following command:

```
$  RUN SYS$SYSTEM:INSTALL  Return
INSTALL>  SYS$SHARE:DCLTABLES/REPLACE  Return
INSTALL>   Ctrl/Z
$
```

3.2 Cluster Considerations

You must perform the following actions on each node that supports VAX VTX, before VAX VTX starts on other nodes in a VAXcluster.

1. Replace DCL tables using the VMS INSTALL utility.
2. Run VTXWPS_STARTUP.COM (if you will be using the VTX print queue).
3. Load the license.
4. Run the IVP.

3.3 Subscriber Account Privileges and Quotas

To work with VAX VTX, subscriber accounts on your system must have certain privileges and quotas.

3.3.1 Privileges

To use VAX VTX, each account must have at least the TMPMBX and NETMBX privileges. Use the VMS Authorize Utility to determine if subscribers have the privileges they require.

3.3.2 Account Quotas

You must ensure that the appropriate subscriber accounts have sufficient quotas to use VAX VTX. Table 3–1 summarizes the quotas user accounts require.

Table 3–1: Subscriber Account Quotas for Using VAX VTX

Account Quota	Value
ASTLM	8
BIOLM	8
BYTLM	10,000
DIOLM	6
ENQLM	10
FILLM	3
TQELM	8
PCFLQUOTA	8000

VAX VTX stores subscriber account quotas in the file SYSUAF.DAT. Use the VMS Authorize Utility to verify and change subscriber account quotas. First set your directory to SYS$SYSTEM and then run AUTHORIZE:

```
$  SET DEFAULT SYS$SYSTEM  Return
$  RUN AUTHORIZE  Return
UAF>
```

At the Authorize Utility prompt (UAF>), enter the SHOW command with an account name to check that particular account. For example:

```
UAF>  SHOW SMITH  Return
```

To change a quota, use the MODIFY command at the UAF> prompt. MODIFY has the following syntax:

MODIFY account-name /quota-name=???

The following example shows how to change the FILLM quota for the SMITH account and then exit from the utility:

```
UAF>  MODIFY SMITH /FILLM=50  Return
UAF>  EXIT  Return
```

After you exit from the utility, the VMS system displays messages indicating whether or not changes were made. After you finish making the changes, the subscriber must log out and log in again for the new quotas to take effect.

For more information on modifying account quotas, see the description of the Authorize Utility in the VMS documentation set.

3.4 Defining System Logicals

If you install the TCP files for future modification, you should define two system logicals at startup time. The following example shows the DEFINE command lines you should enter in the SYS$MANAGER:SYSTARTUP_ V5.COM file for TCP files stored in the default directory.

```
$ DEFINE/SYSTEM/EXECUTIVE VTX$REQUIRE SYS$SYSROOT:[TCPLIB]
$ DEFINE/SYSTEM/EXECUTIVE DSL$REQUIRE SYS$SYSROOT:[TCPLIB]
```

VAX VTX does not require that you define these logicals in order for it to run; however, the logicals are useful when you want to modify the TCP.

3.5 DECnet

You must have DECnet running on your VMS system to run VAX VTX. The VMS operating system comes with a single node DECnet license, so even if you have a single node system, you can run DECnet. If DECnet is already running on your VMS system, you can create a VTX operator's account. If your site is not running DECnet, you must execute two command procedures in order to establish your VMS system as a DECnet node.

3.5.1 Establishing a DECnet Node

To establish a DECnet node, set your default directory to SYS$MANAGER and then identify your VMS system as a DECnet node by executing the command procedure NETCONFIG.COM as follows:

```
$  SET DEFAULT SYS$MANAGER Return
$  @NETCONFIG Return
```

The command procedure is interactive and self-explanatory. The procedure asks you to supply a DECnet node name and DECnet address for your node, and whether you want a default DECnet account. Follow the instructions that appear on your terminal. Your node name can be any 6-character alphanumeric name. If you do not have a multinode DECnet license, a node address of 1 is recommended. If you are configuring a multinode network, you should first read the VMS DECnet documentation. This is the only time you should have to run NETCONFIG in order to use VAX VTX.

3.5.2 Starting DECnet

After you add your node to the DECnet database, you must start DECnet. This procedure activates the changes that you made to the DECnet database and makes your VMS system a recognized DECnet node. To start DECnet, execute the command procedure STARTNET.COM as follows:

```
$  @STARTNET  Return
```

If your site does not have a multinode DECnet license, your terminal displays a series of error messages while STARTNET.COM is executing. You can ignore these. You must execute STARTNET.COM every time you boot your VMS system, but not every time you start VAX VTX. For convenience, you can insert the @STARTNET command in the SYS$MANAGER:SYSTARTUP_V5.COM file so that DECnet starts automatically every time you boot your VMS system.

3.6 Creating a VTX Operator Account

Create a VTX operator account that allows you to run a VTX Server. The operator account requires certain privileges and quotas. To add an operator account to your VMS system, run the VMS Authorize Utility, as described in the documentation on the VMS System Management Subkit. Assign the following privileges as authorized privileges and default privileges to the VTX operator's account:

GROUP
SYSNAM
GRPNAM
TMPMBX
NETMBX

In addition, assign the following quotas to the account:

Account Quota	Value
ASTLM	240
BIOLM	230
BYTLM	65,000
DIOLM	50
ENQLM	300
FILLM	200
TQELM	20

After you create an account for the VTX operator, you need to create a directory for that account. Assign the same UIC to the directory as the Authorize Utility assigned to the operator account.

If you need to run VTX Workbench from the VTX operator account, set the PGFLQUO value to at least 12,000 (see the *VAX VTX Operator's Guide*.)

The Operator's account must have GROUP and GRPNAM privileges so that VTX utilities can manage group logical names. Since these privileges also allow the operator account to define group logical names at the DCL level, Digital recommends that you assign group UICs for operator accounts that differ from user accounts on your system.

3.7 Using Search Lists

When you define the default device and directory names for the VTX operator account with the ADD command in the Authorize Utility, the utility combines these names to become the definition of the logical name SYS$LOGIN when you log in to that account. The format for the command is:

```
ADD new-username /DEVICE=device-name/DIRECTORY=[directory-name]
```

At VMS system startup, if you define the default device name as a system logical name which has an equivalence string that is a VMS search list, you must be sure to create the default directory (*[directory-name]*) for the VTX account on the first device in the search list that is the translation for the default device logical name (*device-name*).

For example, if your system defines SYS$SYSROOT as follows, you can use the DCL command SHOW LOGICAL SYS$SYSROOT to display the definition at your terminal:

```
"SYS$SYSROOT" = "DISK1:[SYS0.]" (LNM$SYSTEM_TABLE) = "SYS$COMMON"
"SYS$COMMON" = "DISK1:[SYS0.SYSCOMMON.]" (LNM$SYSTEM_TABLE)
```

Now, suppose you create the VTX account to have the following SYS$LOGIN definition:

```
"SYS$LOGIN" = "SYS$SYSROOT:[VTX]"
```

You must be sure that the VTX directory ([VTX] in the preceding example, or whatever name you have chosen) is a subdirectory of DISK1:[SYS0]; for example:

```
DISK1:[SYS0.VTX]
```

If your default directory is set to the SYS$LOGIN equivalence name rather than to SYS$LOGIN, you will be unable to start the VTX Server or create any files.

3.8 Enhancing VAX VTX Performance

This section includes information on system tuning and explains how to install VAX VTX as a shared image.

3.8.1 Tuning Your System

After you install VAX VTX, you should adjust your system to enhance performance or lower the use of some system resources. See the *VAX VTX Operator's Guide* for information that may be useful in tuning your system.

3.8.2 Installing VAX VTX as a Shared Image

The most frequently used images of VAX VTX are:

VTXPAD.EXE
VTX$MSCSHR.EXE

While you do not need to install any VAX VTX components as shared images, you can reduce the system overhead and memory requirements by installing it as a shared image, particularly if you expect VAX VTX to be used extensively on your system. To install VAX VTX as a shared image on a system that is currently running, use the VMS Install Utility (INSTALL). You should perform the install operation on a newly rebooted system because the available space in the global page table is less likely to be fragmented.

To install VAX VTX as a shared image, first determine the number of available global pages and global sections on your system. Table 3–2 shows correct values for the GBLPAGES and GBLSECTIONS system parameters.

Table 3–2: Required System Parameter Values

System Parameter	Value
GBLPAGES[1]	n + 1300
GBLSECTIONS[1]	n + 5

[1]The n variable refers to the system parameter values that are currently in use. To install VAX VTX, you must raise those values by the number indicated.

The n + 1300 value for GBLPAGES and the n + 5 value for GBLSECTIONS in Table 3–2 indicate that you must have at least 1300 unused pages and 5 unused sections available on your system for the installation to process successfully.

To calculate how many unused global pages and global sections your system has, perform the following steps:

1. Run the VMS Install Utility (INSTALL) using the following DCL command:

   ```
   $  INSTALL LIST /GLOBAL /SUMMARY Return
   ```

   The Install Utility displays a summary of global pages and global sections used by your system, as well as the current number of unused global pages. For example:

   ```
                  Summary of Local Memory Global Sections

   258 Global Sections Used,  22580/3420 Global Pages Used/Unused
   ```

2. Determine if the number of unused global pages (3420 in the example) is equal to or greater than 1300. If the number of unused pages is less than 1300, you need to increase the value for GBLPAGES.
3. Run the System Generation Utility and use the SHOW command to determine how many global sections have been allocated. For example:

   ```
   $  RUN SYS$SYSTEM:SYSGEN Return
   SYSGEN>  SHOW GBLSECTIONS Return

   Parameter Name    Current   Default   Minimum   Maximum Unit  Dynamic
   --------------    -------   -------   -------   ------- ----  -------
   GBLSECTIONS           512       250        20      4095 Sections
   ```

4. Subtract the amount shown in the summary (258 in the example) from the amount allocated. If the difference is less than 5, you need to increase the value of the GBLSECTIONS parameter.

Section 1.6.6.2 describes the procedures for increasing these values as well as those of other system parameters. See the documentation on the VMS System Management Subkit for more information.

After you reset the system parameter values, invoke the VMS Install Utility from a privileged account and then install VAX VTX as a shared image:

```
$  INSTALL Return
INSTALL>  ADD SYS$SHARE:VTXPAD.EXE /OPEN /SHARED /REPLACE Return
INSTALL>  ADD SYS$SHARE:VTX$MSGSHR.EXE /OPEN /SHARED /REPLACE Return
INSTALL>  EXIT Return
```

You must add the following lines to the appropriate system startup command file so that each time you start the system, VAX VTX is available as a shared image. If your site modularizes its startup procedures, be sure you add the lines to the correct file. The default startup command file for VMS Version 5.n systems is SYS$MANAGER:SYSTARTUP_V5.COM.

NOTE

If you have previously used installed VTX images, make sure you use REPLACE when you install VAX VTX. This command has the following format:

```
$  INSTALL Return
INSTALL>  REPLACE SYS$SYSTEM:VTXPAD.EXE /OPEN /SHARED Return
```

If you install VAX VTX as a shared image, you need to increase the value of the global page and global section parameters. Increase global pages (GBLPAGES) by 1300 pages and global sections (GBLSECTIONS) by 5 sections. See Section 1.6.5 for information on changing these parameters.

3.9 Deleting the [.VTX$VISTA] Subdirectory

After Workbench information providers (IPs) start using the Workbench Utility, VAX VTX no longer requires the [.VTX$VISTA] subdirectory. If you followed the procedure specified in Section 1.6.13, the [.VTX$VISTA] subdirectory should be empty and you can now delete it.

3.10 Print Queue and Workbench Output Files Directory

The print queue no longer uses the SYS$SYSROOT:[VISTA_FILES] directory. When the VTXWPS_STARTUP.COM procedure starts the VAX VTX Version 4.1 print queue, the system creates a new directory, SYS$SYSROOT:[VTX$WB_FILES]. After the system creates this directory, you can move all the files from the [VISTA_FILES] directory to the [VTX$WB_FILES] directory using the following command:

```
$  RENAME SYS$SYSROOT:[VISTA_FILES]*.* SYS$SYSROOT:[VTX$WB_FILES]*.* Return
```

After you move the files, the SYS$SYSROOT:[VISTA_FILES] directory is empty and you can delete it.

3.11 Workbench Server Command Procedure Changes

If your site previously used VISTA Version 3.n to create VTX infobases, you must modify any command procedures you use to start and stop the VTX Servers. Change the commands and logical definitions as noted in Table 3–3.

Table 3–3: Workbench Server Command Procedure Changes

Current:	Change to:
START VISTA_SERVER	START WORKBENCH_SERVER
DEFINE VISTA$SERVER	DEFINE VTX$WB_SERVER
DEFINE VISTA$STYLE	DEFINE VTX$WB_STYLEFILES
STOP VISTA_SERVER	STOP WORKBENCH_SERVER

3.12 VAS Command Procedure Changes

Prior to VTX Version 4.0, the VAS runtime system was started using VASCTL. If you have any existing procedures that use VASCTL, they must be modified to use VTXCTL. All VASCTL functionality has been merged into VTXCTL.

3.13 Determining and Reporting Problems

If an error occurs while using VAX VTX and you believe that VAX VTX is causing the error, take one of the following actions:

- Call your Customer Support Center if you have a BASIC or DECsupport Software Agreement. With these services, you receive telephone support that provides both high-level advisory and remedial assistance.
- Submit a Software Performance Report (SPR) if you have a Self-Maintenance Software Agreement.
- Submit a Software Performance Report (SPR) if you purchased VAX VTX within the past 90 days and you think the problem is caused by a software error.

If you find an error in the VAX VTX documentation, you should fill out and submit the Reader's Comments form at the back of the appropriate VAX VTX manual. Include the section and page number that best describes where the error occurred.

Chapter 4

Installation Verification Procedure

Use the VAX VTX Installation Verification Procedure (IVP) to verify the installation of the product. This procedure takes about 15 minutes. For the most part, the instructions in this chapter assume that you are verifying a new installation of VAX VTX.

There are three different IVPs for VAX VTX. The IVP you run depends on the VTX option you choose. The IVP for the full kit consists of two parts, while the IVP for the VALU runtime kit and the remote update kit have only one part each.

Even though you can install VAX VTX and run the IVP using either a hardcopy or a video terminal, you must have a video terminal to run the second part of the IVP for the full VTX kit.

NOTE

If you install only the TCP and the terminal concentrator, you cannot run the IVP. Also, if you have a previous version of VAX VTX, certain files will already be in place. Therefore, you may need to slightly modify some of these instructions.

4.1 Running the VAX VTX IVP

This section describes how to run the VAX VTX IVP. See Section 4.2 for instructions on how to run the optional portion of the IVP for the full VTX kit.

You can run the IVP during the VAX VTX installation procedure. To run the IVP independent of the installation procedure, you must have VAX VTX Version 4.1 installed on your system and you must log in to an account with privileges described in Section 3.6. Before you run either the IVP or its

optional supplement (for the full VTX kit), you must have DECnet running on your system.

Run the IVP command procedure using the command procedure:

```
$  @SYS$SYSROOT:[SYSTEST]VTX$IVP.COM Return
```

After you enter the command, a message appears indicating that the IVP has begun:

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

  VAX VTX V4.1 Installation Verification Procedure

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

The VTX$IVP.COM command procedure does the following:

- Creates a VAX VTX infobase
- Starts a VAX VTX server
- Starts a Workbench server
- Creates a Workbench library
- Stops the Workbench server
- Starts a VAS server
- Builds and loads VAS transaction definitions

See Appendix A for a sample installation of VAX VTX.

These operations verify the installation of the complete VAX VTX kit.

The next message introduces the optional part of the IVP:

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

    You can now run the optional part of the IVP.  See
    the "VTX Installation Guide" for instructions.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

The automated portion of the IVP is now complete. Assuming it detected no errors, the IVP displays the following message, regardless of the command procedures you chose to run the IVP:

```
 * * * * *  S U C C E S S  * * * * *

VAX VTX V4.1 IVP completed successfully

* * * * *  S U C C E S S  * * * * *
```

4.2 Performing the Optional Part of the IVP

This section describes how to run the optional part of the VAX VTX IVP for the full VTX kit. You must use a video terminal to run this part of the IVP. You must also have VAX VTX Version 4.1 installed on your system.

To perform this part of the VAX VTX IVP, follow these steps:

1. Enter the following command to start your VTX session:

   ```
   $ VTX Return
   ```

   A VTX menu with only one choice appears on the screen.

2. Enter 1 at the CHOICE: prompt and press RETURN:

   ```
   Choice: 1 Return
   ```

   VAX VTX displays a form with three fields on the screen.

3. Fill in each field with any string of text of no more than five characters, and press the FORM ENTER function key sequence (PF1-ENTER for Digital terminals).

   A VTX display page appears on the screen. This is the last page in the VAX VTX IVP.

4. Exit from VTX, using the EXIT function key sequence (PF1-. for Digital terminals).

   That completes the optional portion of the VAX VTX IVP. Next you must stop the servers. To so so, follow these steps:

1. Run the VTXCTL Utility using the following command:

   ```
   $ Run SYS$SYSTEM:VTXCTL Return
   ```

2. Type the STOP commands and the EXIT command at the CTL> prompt; for example:

   ```
   CTL> STOP SERVER/NAME=IVP Return
   CTL> STOP VAS/NAME=IVP Return
   CTL> EXIT Return
   $
   ```

Next, verify that the information you typed on the VAX VTX form was accepted correctly. Enter the following command to display the VAS log file, VASIVP.ASL:

```
$ TYPE VASIVP.ASL Return
```

Check that the text you entered in the three fields on the VAX VTX form appends to the first line in the log file.

The log should also include two additional lines. The first of those lines should contain the following text:

```
Installation Verification Procedure
```

The next line should indicate that the IVP has been successfully completed:

```
Installation Verification Procedure Successfully Completed
```

If you see this last line in the VAS.ASL file, you know that the optional part of VAX VTX IVP processed correctly.

4.3 Conclusion

After you successfully perform all the IVP tasks, you have installed your VAX VTX system correctly.

If you encounter any difficulties, first verify that the appropriate files for starting VTX are in the expected directories. Next, make sure you have followed the procedures in this manual, including setting up the correct quotas and privileges. Then reinstall VTX. If failures still occur, submit an SPR or contact your local support office for assistance.

Appendix A

Sample Installation

This appendix contains a sample installation for the VAX VTX full development kit, using VMSINSTAL. This sample was run on a system that had no previous version of VAX VTX installed.

If you do not install the full kit, you will not see all of the following messages and questions when you perform your installation. If you have other layered products on your system, you may see additional messages and questions when you perform your VAX VTX installation.

```
$ @SYS$UPDATE:VMSINSTAL VTX041 POLO$MUA6:

 VAX/VMS Software Product Installation Procedure T5.4-4ET


It is 25-APR-1990 at 11:55.

Enter a question mark (?) at any time for help.
%VMSINSTAL-W-NOTSYSTEM, You are not logged in to the SYSTEM account.
%VMSINSTAL-W-ACTIVE, The following processes are still active:
 VTXTEST
 DECW$WM_1
 DECW$WM_4
 _TWA7:
 VTXSRV_IVP
 DECW$TE_1
 VASIVP
 _TWA6:
* Do you want to continue anyway [NO]? Y
* Are you satisfied with the backup of your system disk [YES]?

The following products will be processed:
  VTX V4.1

 Beginning installation of VTX V4.1 at 11:55

%VMSINSTAL-I-RESTORE, Restoring product save set A ...
%VMSINSTAL-I-RELMOVED, Product's release notes have been moved to SYS$HELP.
```

```
*****************************************************************
*                                                               *
*                VAX VTX V4.1                                   *
*                                                               *
*                  Installation Procedure                       *
*                                                               *
*        Copyright 1990, Digital Equipment Corporation          *
*                                                               *
*****************************************************************

     1. Install Subscriber interface only

     2. Conversational installation

     3. Install Full VTX kit

     4. Install Full VTX kit with TCP source code

     5. Exit from this installation procedure

* Enter option [2]: ?

    Please choose one of the 5 alternatives. The meaning of the
    alternatives are:

        1. Installs the VTX Subscriber interface only. This is
           what you need to access a local or remote VXT Infobase.

        2. Choice 2 takes you through a conversational installation,
           where you can select the parts that you want to install.

        3. Installs a complete VTX system, with all its
           options, except for the TCP sources.

           You do not need the TCP sources unless you are planning
           to customize the VTX subscriber interface through source
    code modifications.

        4. Same as Choice 3 except that it also installs the TCP
    sources.

        5. Choice 5 exits from this installation procedure.

* Enter option [2]:

    This is the conversational mode of VTX installation. You will
    be asked to select the VTX options that you want to install.

    If you are not sure about what a question means, please type a
    question-mark (?) at the prompt. This will cause a more
    detailed description to be displayed.

    At the end of the questions you have the option of confirming
    your selection or going back to this procedure's main menu.

    ****************************************************************
```

```
    You have the option of installing the VTX subscriber
    environment. This option permits VTX users to access a
    VTX infobase.

* Would you like to install the VTX subscriber environment [YES]? ?

    SUBSCRIBER ENVIRONMENT
    ----------------------

    You have the option of installing the VTX subscriber
    environment. This option includes the following parts:

        #  VTXPAD; Subscriber's interface to VTX

        #  VTXCON; Concentrator for VTX Subscriber sessions

        #  MSDOS; Subscriber's interface to VTX for MS-DOS
           (reference kit)

    Please answer YES or NO.

* Would you like to install the VTX subscriber environment [YES]?

    You have the option of installing the Information Provider tools
    part of VTX. They are required in order to update a VTX infobase.

    This option requires the VTX Subscriber Environment.

* Would you like to install the VTX Information Provider tools [YES]? ?

    INFORMATION PROVIDER TOOLS
    --------------------------

    The Information Provider's tools are required in order to update
    a VTX Infobase. This installation option includes the following
    tools:

        #  APMS; Automatic Page Management System

        #  WPSSMB; A tool for paginating WPS-PLUS documents for use
            in VTX

        #  PAGER; A tool for paginating DDIF documents and text files

        #  WBGI; Workbench graphical interface.

        #  WBCLU; Workbench command language.

        #  UPD; A command language updating a VTX infobase

        #  RUSL; A callable interface for remote updates of VTX infobases

        #  IVU; Infobase Verification Utility.

    This option implies that the VTX Subscriber environment be installed.

    Please answer YES or NO.

* Would you like to install the VTX Information Provider tools [YES]?

    A few file formats for information provider tools changed between
    VTX V3.x and V4.0. However, nothing has changed between V4.0 and
    V4.1. If you plan to convert VTX files from a VTX V3.x system then
    this option is of value to you, otherwise not.
```

```
* Would you like to install VTX V3.x IP Conversion tools [YES]? ?

    V3.X CONVERSIONS
    ----------------

    A few file formats for Information Provider tools changed between
    VTX V3.x and V4.0. This option includes the following conversion
    tools:

        #  PFC; Page File conversion tool

        #  VLC; Converts a VISTA library to a Workbench library

        #  IAF; Converts a APMS Index

    If you plan to convert any VTX V3.x files associated with any of
    the above three tools to V4.0 format then you should answer YES
    to this option.

    Please note that there are no file conversions needed if you go from
    V4.0 to V4.1.

* Would you like to install VTX V3.x IP Conversion tools [YES]?

    You have the option of installing the files needed to run any of
    the VTX servers on this system.

* Would you like to install the VTX Servers [YES]? ?

    SERVERS
    -------

    The VTX Server environment contains the following parts:

        #  SRV; Allows local and remote VTX Subscribers to access a
           VTX infobase on this system

        #  UPDSRV; Allows remote VTX Information Providers to update
           VTX infobases on this system.

        #  WBSRV; Allows remote VTX Information Providers to access
           Workbench libraries on this system.

        #  ACU; VTX infobase access Authorization and Accounting utility

    Please answer YES or NO.

* Would you like to install the VTX Servers [YES]?

    You have the option of installing the VTX tools required to create
    and run a VTX Back End Application.

* Would you like to install the VTX Back End environment [YES]? ?

    BACK END APPLICATIONS
    ---------------------

    VTX Back End applications are programs that are started in
    response to a subscriber referencing a specific page in a
    VTX Infobase. The Back End Application can dynamically create
    the actual VTX page from private data or by asking a remote
    computer, such as an IBM Mainframe.  It can also guide the
    VTX Server that is connected to it, to display pages already
    in its infobase.

    This option includes the following parts:
```

```
        #  VAS; A high level programming interface for writing VTX
           Back End applications.

        #  ELK; A low level programming interface to writing a VTX
           Back End applications

    Both components include their programming interface and their
    associated run-time environment.

    Please answer YES or NO.

* Would you like to install the VTX Back End environment [YES]?

    The VTX Subscriber interface can be customized somewhat by
    changing the source code. Please refer to your VTX Warranty
    Exclusion for details on what can be changed without violating
    your standard VTX support contract.

    You need access to a BLISS32 compiler in order to compile the
    changes.

* Would you like to install the TCP source code [NO]? ?

    MODIFIED TSMs
    -------------

    The VTX Subscriber interface can be customized somewhat by
    changing the source code. Please refer to your VTX Warranty
    Exclusion for details on what can be changed without violating
    your standard VTX support contract.

    This option will install the files you may need when you
    customize the Front End as well as related files to relink
    the PAD, CON and CTL.

    You need access to a BLISS32 compiler in order to compile the
    changes.

    Please answer YES or NO.


* Would you like to install the TCP source code [NO]?

    This version has added a new keypad. The new keypad is a
    superset of the traditional VTX default keypad and the
    ALL-IN-1 keypad, except where there were conflicting mappings.

    You have the option of making the new keypad the default keypad,
    instead of the one that was default in previous versions of VTX.

* Would you like to install the new keypad [NO]? ?

    DEFAULT DEVICE/KEYPAD
    ---------------------

    This version has added a new keypad, the COMMON keypad.
    The COMMON keypad is a superset of the traditional VTX
    default keypad and the ALL-IN-1 keypad, except where there
    were conflicting mappings. The Subscriber's Booklet describes
    the exact layout of the new keypad.

    This installation option allows you to make the new keypad
    the default keypad on your system. The default can be
    overriden by a logical name (VTX$DEFAULT_DEVICE) and also by
    the user explicitly stating desired keypad at command line.
```

```
    If you answer YES the COMMON keypad will be your system
    default keypad. If you answer NO the traditional VTX keypad
    will be your system default keypad.

* Would you like to install the new keypad [YES]?
%VTX-I-ENDCONV, end of questions in conversational part
* Do you want to purge files replaced by this installation [YES]?
* Do you want files made obsolete by this installation deleted [YES]?


 This kit contains an Installation Verification Procedure
 to verify the correct installation of VAX VTX.

* Do you want to run the IVP after the installation [YES]?
* Are you satisfied with all your answers for this installation [YES]?

 All questions regarding the installation of VAX VTX have now
 been asked.

 Depending on your configuration, current system activity and
 options you selected during this installation, it will
 continue from 20 minutes to 4 hours and 20 minutes.

 It takes 4 hours and 20 minutes to install the complete
 VTX kit, including the optional TCP sources followed by
 running the IVP, on a VAXstation 2000. It takes approximately
 20 minutes to install the complete kit on a VAX 8800.

%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%VMSINSTAL-I-RESTORE, Restoring product save set D ...
%VTX-I-BUILD, building core files
%VTX-I-LINK, linking VTX$MSGSHR ..
%VTX-I-LINK, linking VTX$DSLSHR ..
%VTX-I-LINK, linking VTXCTL ..
%VTX-I-BUILD, building files for IVP
%VTX-I-BUILD, building subscriber environment
%VTX-I-LINK, linking VTXPAD ..
%VTX-I-LINK, linking VTXCON ..
%VTX-I-LINK, linking VTX$PANESHR ..
%VTX-I-BUILD, building IP tools
%VTX-I-LINK, linking VTXAPMS ..
%VTX-I-LINK, linking VTXWPSSMB ..
%VTX-I-LINK, linking VTX$PAGER ..
%VTX-I-LINK, linking VTX$WBCLU ..
%VTX-I-LINK, linking VTX$WBGI ..
%VTX-I-LINK, linking RUSLSHR ..
%VTX-I-LINK, linking VTXUPD ..
%VTX-I-LINK, linking VTXIVU ..
%VTX-I-BUILD, building IP conversion tools
%VTX-I-LINK, linking VTXPFC ..
%VTX-I-LINK, linking VTXVLC_V4 ..
%VTX-I-LINK, linking VTXIAF_V4_CONVERT ..
%VTX-I-BUILD, building servers
%VTX-I-LINK, linking VTXSRV ..
%VTX-I-LINK, linking VTXUPDSRV ..
%VTX-I-LINK, linking VTX$WBSRV ..
%VTX-I-LINK, linking VTXACU ..
%VTX-I-BUILD, building backend environment
%VTX-I-LINK, linking ELKSHR ..
%VTX-I-LINK, linking VASMSGSHR ..
```

```
%VTX-I-LINK, linking VAS ..
%VTX-I-DELOBS, Deleting obsolete files
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target
directories...

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

  VAX VTX V4.1 Installation Verification Procedure

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *


* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
    This part of the IVP leaves the following files
    in your SYS$LOGIN:

 VTX$IVPVTD.VTD
 VTX$IVPWORKBENCH.VTD

    You may want to delete these files after the IVP
    has completed.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
%VTXIVP-I-UPD, running VTXUPD to create IVP infobase
VAX VTX Infobase Update Utility V4.1
%VTX-I-RNGMSG1, Your current range is 0 to 9~~~~~~~~~~~~~
%VTX-I-RNGMSG2, The range for page file SYS$LOGIN:VTX$IVPVTD is
0 to 9~~~~~~~~~~~~~
Total of 4 pages added
%VTX-I-RNGMSG1, Your current range is 0 to 9~~~~~~~~~~~~~
%VTX-I-RNGMSG2, The range for page file SYS$LOGIN:VTX$IVPWORKBENCH is
0 to 9~~~~~~~~~~~~~
%VTX-I-PAGFILCLS, Page file SYS$LOGIN:VTX$IVPWORKBENCH closed
%VTX-I-PAGFILCLS, Page file SYS$LOGIN:VTX$IVPVTD closed
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

    This part of the IVP leaves the following files
    in your SYS$LOGIN:

 VTXBASE.TXT     VTXACF.VTA
 VTXSERVER.COM     VTX$WBSRV.COM
 VTXSRV_IVP.VTE

    You may want to delete these files after the IVP
    has completed.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *"

    This part of the IVP uses DECnet objects 43 and 59.
    If these objects are currently being used on
    this system, this IVP may signal success even
    though not all components have been tested.

    If extraneous errors occur while executing this
    procedure, stop all existing VTX, Workbench,
    and Update servers, as well as VAS runtime images
    and execute this procedure again.

    Refer to the VAX VTX Installation Guide for further
    details on the Installation Verification Procedure.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

```
Ignore any ACU_ERROPNACF and FNF error messages, they are normal.

                     VAX VTX Account Control Utility V4.1

%VTX-W-ACU_ERROPNACF, VTXACF.VTA Account file could not be opened
-RMS-E-FNF, file not found
Account file VTXACF.VTA has been created.

Account successfully added
VTXACF.VTA account file modified
%VTXIVP-I-SRV, starting a VTX infobase server
                        VAX VTX Control Program V4.1

...Working...
...Working...


%VTXIVP-I-WORKBENCH, starting a VTX Workbench server

Ignore any ERROPNLIB and INVLIBFIL messages
They simply mean that old library files exist
for this account, and are normal.

                        VAX VTX Control Program V4.1

...Working...

%VTX-I-LIBCREATED, new Workbench library created

                        VAX VTX Control Program V4.1

...Working...
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

    This part of the IVP leaves the following files
    in your SYS$LOGIN:

     VTX$IVPTDS.TDS VAS.COM
     VTX$IVPTDS.TDI VASIVP.ASL
     VTX$IVPTDS.LIS VASIVP.ASE

    You may want to delete these files after the IVP
    has completed.

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
%VTXIVP-I-VAS, starting a VAS server
                        VAX VTX Control Program V4.1

...Working...

Known VAS status as of 25-APR-1990 10:16:12.63
VAS started:       25-APR-1990 10:16:09.50
Communication  ENABLED  DECNET object number: 59
Oper notification DISABLED
Logging for log channel VAS$LOG_CHANNEL
 written to log file SYS$SYSDEVICE:[VTXTEST]VASIVP.ASL;1
Transactions loaded from: SYS$SYSDEVICE:[VTXTEST]VTX$IVPTDI.TDI;1
No CURs loaded
VTX form pages displayed to date: 0
Total number of requests made:    0
-----------------------------------------------------
Sessions       Current active:      0
               Current stopping:    0
               Total connects:      0
-----------------------------------------------------
```

```
   * * * * *  S U C C E S S  * * * * *
  VAX VTX V4.1 IVP completed successfully
   * * * * *  S U C C E S S  * * * * *
Installation of VTX V4.1 completed at 10:16
VMSINSTAL procedure done at 10:17
```

Appendix B

VTX Files and Logical Names Installed on Your System

The VAX VTX installation procedure installs various files on your system and defines several logical names. Section B.1 lists the files the procedure installs. Section B.2 lists the logical names that are added to the system logical name table.

B.1 File Names

The following subsections contain the names of all files the VAX VTX installation procedure installs on your system. These lists contain files left by the full VTX installation. If you choose to install a different option, only a subset of these files will remain.

NOTE

The figures given in the Blocks columns of the tables are approximate values and may differ from the size of the files installed on your system.

B.1.1 SYS$COMMON:[ELKLIB]

File	Blocks
VTXELKDEF.BAS	28
VTXELKDEF.COB	28

File	Blocks
VTXELKDEF.FOR	26
VTXELKDEF.H	21
VTXELKDEF.PAS	27
VTXELKDEF.REQ	23
VTXELKLIB.OPT	3

Total of 7 files and 156 blocks

B.1.2 SYS$COMMON:[RUSLLIB]

File	Blocks
RUSLDEF.BAS	41
RUSLDEF.COB	41
RUSLDEF.FOR	27
RUSLDEF.H	41
RUSLDEF.PAS	56
RUSLDEF.R32	28
RUSLOPT.OPT	3

Total of 7 files and 237 blocks

B.1.3 SYS$COMMON:[SYS$STARTUP]

File	Blocks
VTXWPS_STARTUP.COM	8

Total of 1 file and 8 blocks

B.1.4 SYS$COMMON:[SYSEXE]

File	Blocks
VAS.EXE	167
VASSNA.EXE	22
VTX$PAGER.EXE	32
VTX$WBCLU.EXE	181
VTX$WBGI.EXE	428
VTX$WBSRV.EXE	240
VTXACU.EXE	103
VTXAPMS.EXE	123
VTXCON.EXE	875
VTXCTL.EXE	275
VTXIAF_V4_CONVERT.EXE	12
VTXIVU.EXE	62
VTXPAD.EXE	954
VTXPFC_V4.EXE	27
VTXSRV.EXE	140
VTXUPD.EXE	543
VTXUPDSRV.EXE	96
VTXVLC_V4.EXE	31
VTXWPSSMB.EXE	107

Total of 19 files and 4418 blocks

B.1.5 SYS$COMMON:[SYSHLP]

File	Blocks
VASCTLHLP.HLB	90
VTX$TCP_DW.HLB	145

File	Blocks
VTX041.RELEASE_NOTES	101
VTXACUHLP.HLB	106
VTXAPMS.HLB	58
VTXCTLCON.HLB	65
VTXCTLCTL.HLB	151
VTXCTLSRV.HLB	73
VTXCTLUPD.HLB	40
VTXCTLWBSRV.HLB	44
VTXDCLHLP.HLP	54
VTXIVUHLP.HLB	22
VTXUPDHLP.HLB	209
VTXUPDMNUHLP.HLB	37

Total of 14 files and 1195 blocks

B.1.6 SYS$COMMON:[SYSLIB]

File	Blocks
ELKSHR.EXE	37
RUSLSHR.EXE	78
VTPDCL.CLD	38
VTX$DSLSHR.EXE	112
VTX$PANESHR.EXE	44
VTX$TCP_DW.UID	152
VTX$WSSVNSHR.EXE	202

Total of 7 files and 663 blocks

B.1.7 SYS$COMMON:[SYSMSG]

File	Blocks
TCPMSG.EXE	388
VASMSGSHR.EXE	44
VTX$MSGSHR.EXE	388

Total of 3 files and 820 blocks

B.1.8 SYS$COMMON:[SYSTEST.VTX]

File	Blocks
VTX$IVPTDS.TDS	2
VTX$IVPVTD.VTD	21
VTX$IVPVTU.VTU	1
VTX$IVPWORKBENCH.VTD	21
VTX$IVP_BACKEND.COM	10
VTX$IVP_IPTOOL.COM	10
VTX$IVP_SERVER.COM	16

Total of 7 files and 81 blocks

B.1.9 SYS$COMMON:[SYSTEST]

File	Blocks
VTX$IVP.COM	7

Total of 1 file and 7 blocks

B.1.10 SYS$COMMON:[TCPLIB]

File	Blocks
A1_LOCAL_COMMAND.OBJ	2
A2VTPDEC.B32	544
A2VTPLOCAL.CLD	3
ADVTPDEC.B32	544
CALLPADLNK.COM	43
CONCMD.CLD	32
CONCMD.OBJ	27
CTL.OLB	896
CTLCMD.CLD	12
CTLCMD.OBJ	13
CTLDEF.L32	28
CTLMSG.MSG	49
CTLMSG.OBJ	49
DSLDEF.L32	24
LINKCON.COM	4
LINKCON_3270.COM	4
LINKCTL.COM	4
LINKPAD.COM	4
LINKPAD_NODECW.COM	4
LINKTCPMSG.COM	3
LOCAL_COMMAND.OBJ	2
MINILOCAL.CLD	4
MINITEL_LOCAL_COMMAND.OBJ	2
PAD.OLB	2208
PADXFER.OLB	122
SRVCMD.CLD	17
SRVCMD.OBJ	12
SRVMSG.MSG	6
TCPDEF.L32	525

File	Blocks
TCPHLPMSG.MSG	382
TCPHLPMSG.OBJ	579
TCPMSG.MSG	50
TCPMSG.OBJ	57
UPDSRVCMD.CLD	10
UPDSRVCMD.OBJ	8
VAPDEF.L32	74
VASMSG.MSG	146
VASMSG.OBJ	56
VISTASRV_CMD.CLD	12
VISTASRV_CMD.OBJ	9
VTCDECWINDOWS.OBJ	2
VTPCEPT.B32	202
VTPDCL.CLD	38
VTPDEC.B32	333
VTPDECWINDOWS.B32	537
VTPDECW_DEFS.L32	339
VTPDECW_HELP.HLP	137
VTPDECW_HELP.L32	34
VTPDECW_UIL.UIL	5
VTPDECW_UILDEF.UIL	138
VTPDECW_UILHELP.UIL	8
VTPDECW_UILMENU.UIL	159
VTPDECW_UILMISC.UIL	14
VTPIBM.B32	245
VTPINIT.B32	58
VTPLOCAL.CLD	4
VTPMINITEL.B32	253
VTPNAPLPS.B32	280
VTPNORPAK.B32	241
VTPPN.B32	223
VTPPSI.B32	100

File	Blocks
VTPRESTEL.B32	236
VTPSNA3270DS.B32	409
VTPTALK.B32	185
VTPVTX20.B32	494
VTPVWS.B32	258
VTX$IDENT.OPT	2
VTX$LMF.OBJ	4
VTX$SNA3270DF.R32	43
VTX$UISENTRY.R32	181
VTX.MSG	528
VTX.OBJ	574
VTX20LOCAL.CLD	4
VTX20_LOCAL_COMMAND.OBJ	2
VTXUTIL.OBJ	5

Total of 75 files and 12845 blocks

B.1.11 SYS$COMMON:[VASLIB]

File	Blocks
VAS.COM	4
VASSNA.COM	3

Total of 2 files and 7 blocks

B.1.12 SYS$COMMON:[VTX$LIBRARY]

File	Blocks
SAMPLE_STYLE.VTX	1
VTX$DOSTCP.EXE	175
VTX$PCHLPAT.TXT	19
VTX$PCHLPATAP.TXT	19
VTX$PCHLPEP.TXT	19
VTX$PCHLPEPAP.TXT	19
VTX$PCHLPLK.TXT	20
VTX$PCHLPLKAP.TXT	20
VTX$PCHLPXT.TXT	19
VTX$PCHLPXTAP.TXT	19
VTX$WBSRV.COM	6
VTX.PRA	1
VTX.PRC	7
VTXBASE.TXT	2
VTXCON.COM	5
VTXDOSIN.BAT	4
VTXDOSQ.EXE	32
VTXIAF_V4_CONVERT.CLD	3
VTXIAF_V4_CONVERT.COM	4
VTXIAF_V4_CONVERT.FDL	6
VTXMAIN.VTU	67
VTXOPTIONS.OPT	7
VTXPFC_V3_UNTUNED.FDL	4
VTXPFC_V4_CLD.CLD	3
VTXPFC_V4_CONVERT.COM	5
VTXPFC_V4_FDL.FDL	5
VTXSERVER.COM	8
VTXUPDSRV.COM	6
VTXVLC_V4.COM	5

File	Blocks
VTXVLC_V4_CLD.CLD	3
VTXWPS_FILE_HEADERS.	3
VTX_INTERNALS.VTU	39

B.2 Logical Names

VAX VTX enters no logical names into the system logical name table when you install VAX VTX. The VTXWPS_STARTUP.COM file defines the following logical names. These names are automatically entered into the system logical name table if the system is rebooted or if the software is invoked.

- VTX$WB_FILES—Points to SYS$COMMON:[VTX$WB_FILES]
- VTX$VTU_FILES—Points to SYS$COMMON:[VTU_FILES]

If you are installing the VALU components of VAX VTX, you should define three system logicals at startup time. These logicals are needed to compile ELK and RUSL applications. You can include these DEFINE commands in the system startup command file:

```
$ DEFINE/SYSTEM/EXECUTIVE ELK$LIB SYS$SYSROOT:[ELKLIB]
$ DEFINE/SYSTEM/EXECUTIVE RUSL$LIBRARY SYS$SYSROOT:[RUSLLIB]
$ DEFINE/SYSTEM/EXECUTIVE RUSL$LIB SYS$SYSROOT:[RUSLLIB]
```

Index

A

Aborting the installation, 2–2
Accessing the online release notes, 2–1
Account quotas, 3–5
After installing VAX VTX
  Cluster considerations, 3–4
  Configuring print tables, 3–2
  Creating VTX Operator account, 3–8
  DECnet, 3–6
    Establishing a DECnet node, 3–7
    Starting DECnet, 3–7
  Defining system logicals, 3–6
  Deleting the .VTX$VISTA subdirectory, 3–12
  Editing the system startup file, 3–1
  Enhancing performance, 3–9
    Installing VTX as a shared image, 3–10
    Tuning your system, 3–10
  Establishing a print queue, 3–1
  Print queue and workbench output files, 3–12
  Subscriber account requirements and quotas, 3–5
    Privileges, 3–5
  Using search lists, 3–9
Audience, ix
AUTOGEN command, 1–8

B

Books in the documentation set, x

C

Changes
  To the workbench server command procedure, 3–12
  To VAS command procedure, 3–13
Changing system parameters with AUTOGEN, 1–8
Checking
  System parameter values, 1–7
Choosing
  To continue the installation, 2–6
  To purge files, 2–10
  To run the Installation Verification Procedure (IVP), 2–12
Cluster considerations, 3–4
Compatible Digital software, 1–2
Completing the installation procedure, 2–13
Configuring print tables for VTX$QUEUE, 3–2
Conventions used in this manual, xi
Converting old VTX files, 1–12
Creating a VTX Operator account, 3–8

D

DECnet
  Establishing a node, 3–7
  Starting, 3–7
Defining system logicals, 3–6
Deleting
  Obsolete files, 2–10
  VTX$VISTA subdirectory, 3–12
Determining and reporting problems, 3–13
Disk space needed to install VAX VTX, 1–5

E

Editing the system startup file, 3–1
Enhancing VTX performance, 3–9
  Installing VTX as a shared image, 3–10
  Tuning your system, 3–10
Error recovery, 2–17
Establishing

Establishing (Cont.)
DECnet node, 3–7
Print queue, 3–1
Example VAX VTX installation, A–1

F

Files added to
SYS$COMMON:[ELKLIB], B–1
SYS$COMMON:[RUSLLIB], B–2
SYS$COMMON:[SYS$STARTUP], B–2
SYS$COMMON:[SYSEXE], B–3
SYS$COMMON:[SYSHLP], B–3
SYS$COMMON:[SYSLIB], B–4
SYS$COMMON:[SYSMSG], B–5
SYS$COMMON:[SYSTEST.VTX], B–5
SYS$COMMON:[SYSTEST], B–5
SYS$COMMON:[TCPLIB], B–6
SYS$COMMON:[VASLIB], B–8
SYS$COMMON:[VTX$LIBRARY], B–9
Files and logical names installed on your system, B–1
Files made obsolete by the installation procedure, 2–10

G

General information on installing VAX VTX, 2–1
Aborting the installation, 2–2
Accessing online release notes, 2–1
Running the IVP, 2–2

H

Hardware requirements, 1–2

I

Installation procedure requirements, 1–4
Disk space needed, 1–5
Media used, 1–4
Privileges needed, 1–4
System parameters, 1–6
Time taken, 1–4
Installation Verification Procedure
Requirements, 1–11
Running the IVP, 4–1
Running the optional part, 4–3
Installing the MS-DOS TCP on Your PC, 2–13
Installing VAX VTX
As a shared image, 3–10
Error recovery, 2–17
Installing VAX VTX (Cont.)
General information, 2–1
Aborting the installation, 2–2
Accessing online release notes, 2–1
Running the IVP, 2–2
Invoking VMSINSTAL, 2–2
Media used, 1–4
Preparations and requirements, 1–1
The installation procedure, 2–2
Completing the procedure, 2–13
Informational messages, 2–12
Questions, 2–4
Running the IVP, 2–12
Intended audience, ix

L

Licensing, 1–3
Management of, 1–3
Logical names added to your system, B–10

M

Managing your licenses, 1–3
Managing your VTX licenses
See Licensing
Media used for VAX VTX installation, 1–4
Messages, 2–12
MODPARAMS.DAT file, 1–8
MS-DOS Terminal Control Program (TCP)
Installing on PCs, 2–13

N

Names of files installed on your system, B–1

O

Obsolete files, deleting, 2–10
Operating system
Components required, 1–1
Information, ix
Operator account, 3–8
Optional software, 1–2
Output files directory for Workbench, 3–12

P

Page file quotas, 1–8
Performance enhancements, 3–9
Installing VTX as a shared image, 3–10

Performance enhancements (Cont.)
Tuning your system, 3–10
Performing the optional part of the IVP, 4–3
Preparing to install VAX VTX, 1–1
Prerequisite
Hardware, 1–2
Software, 1–2
Print
Queues
Establishing, 3–1
Workbench output files, 3–12
Tables, 3–2
Privileges
Io install VAX VTX, 1–4
Subscriber accounts, 3–5
Problems, determining and reporting, 3–13
Process account quotas, 1–9
Purging files during installation, 2–10
Purpose of this manual, ix

Q

Questions asked during installation, 2–4
Quotas
For subscriber accounts, 3–5
Page file, 1–8
Process account, 1–9
Subscriber accounts, 3–5

R

Recovering from errors, 2–17
Related documentation, x
Reporting problems, 3–13
Required
Operating system components, 1–1
System parameter values, 3–10
Requirements
For the IVP, 1–11
For VAX VTX VISTA Utility, 1–12
For VMSINSTAL, 1–10
Installation procedure, 1–4
Disk space needed, 1–5
Media, 1–4
Privileges needed, 1–4
System parameters, 1–6
Time taken, 1–4
Page file quota, 1–8
Process account quotas, 1–9
VAX VTX, 1–11
Running the Installation Verification Procedure (IVP), 2–2, 2–12, 4–1

S

Search lists, 3–9
Selecting VAX VTX components to install, 2–6
Software
Optional, 1–2
Prerequisite, 1–2
Starting DECnet, 3–7
Structure of this manual, x
Subscriber account
Privileges, 3–5
Quotas, 3–5
Subscriber account requirements and quotas, 3–5
SYS$COMMON:, B–1
See Files added to SYS$COMMON:[RUSLLIB]
Files added, B–2
SYS$COMMON:[SYS$STARTUP]
Files added, B–2
SYS$COMMON:[SYSEXE]
Files added, B–3
SYS$COMMON:[SYSHLP]
Files added, B–3
SYS$COMMON:[SYSLIB]
Files added, B–4
SYS$COMMON:[SYSMSG]
Files added, B–5
SYS$COMMON:[SYSTEST.VTX]
Files added, B–5
SYS$COMMON:[SYSTEST]
Files added, B–5
SYS$COMMON:[TCPLIB]
Files added, B–6
SYS$COMMON:[VASLIB]
Files added, B–8
SYS$COMMON:[VTX$LIBRARY]
Files added, B–9
System
Generation Utility, 1–7
Logicals, 3–6
Parameters, 1–6
Startup file, 3–1
SYSUAF.DAT file, 3–5

T

Tables
Disk space requirements, 1–5

Tables (Cont.)
Process account quotas, 1–9
The installation procedure, 2–2
Choosing
To continue, 2–6
To purge files, 2–10
To run the IVP, 2–12
Completing the installation procedure, 2–13
Deleting obsolete files, 2–10
Informational messages, 2–12
Invoking VMSINSTAL, 2–2
Questions, 2–4
Running the IVP, 2–12
Selecting VAX VTX components, 2–6
Time taken to install VAX VTX, 1–4
Tuning your system, 3–10
Types of licenses for VAX VTX, 1–3
See Licenses

U

Using AUTOGEN to change system parameter values, 1–8
Using search lists, 3–9

V

VAS command procedure changes, 3–13
VAX VTX
Components
Selecting which ones to install, 2–6
Converting old files, 1–12
General information about installing, 2–1
Aborting the installation, 2–2
Accessing online release notes, 2–1
Running IVP, 2–2
Licensing, 1–3
Requirements, 1–11
VISTA Utility requirements, 1–12
VMS Authorize Utility, 3–5
VMSINSTAL
Invoking, 2–2
Requirements, 1–10
VMS tailoring classes, 1–1
VTX$QUEUE, 3–2
VTX$VISTA subdirectory, deleting, 3–12

W

Workbench
Output files directory, 3–12
Workbench (Cont.)
Server command procedure changes, 3–12