VXT Software

On InfoServer Systems

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VXT Software
On InfoServer Systems

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This section describes VXT software installation and system management tasks on the InfoServer operating system.

Internet Address for Reader Comments

You can send your comments and suggestions about this guide and other VXT manuals by electronic mail to the following Internet address:

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Revision/Update Information	This is a revised document.
Operating System & Version:	InfoServer Version 2.2
Software Version:	VXT Version 2.1

Digital Equipment Corporation
Maynard, Massachusetts

Related Documents

For information on...	Refer to...
InfoServer systems	*InfoServer 100 Installation and Owner's Guide*
	InfoServer 150 Installation and Owner's Guide
	InfoServer System Operations Guide
VXT software and VXT 2000 windowing terminals	*VXT Software Version 2.1 Release Notes*
	VXT 2000+/VXT 2000 Windowing Terminal Installing and Getting Started
	VXT 2000+/VXT 2000 Windowing Terminal User Information
	VXT 2000+/VXT 2000 Windowing Terminal Release Notes

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1

Installing VXT Software on an InfoServer System

This chapter provides instructions for installing VXT software on one of Digital's InfoServer systems. Read this chapter before starting the installation procedure.

1.1 Preparing for the Installation

This section helps you determine whether or not

- Your distribution kit includes all components listed on your BOM, if you are installing VXT software from media
- Your system meets hardware, software, and disk space requirements for installing VXT software
- You have enough available disk space
- You need to back up your system disk

Your bill of materials (BOM) specifies the number and contents of your media. Be sure to verify the contents of your kit with this information. If you find missing or damaged parts in your kit, contact your local Digital representative.

Checking the Media Software Distribution Kit

For installations from media, use the BOM to check the contents of your software distribution kit.

The kit includes this installation guide and the **software distribution** CD–ROM. The CD–ROM contains the VXT software files, including system software, fonts, and support for group and terminal resource files.

Using the Release Notes

The software kit provides release notes. The documentation kit also provides hardcopy release notes. Digital strongly recommends that you read the release notes before proceeding with the installation.

1.2 Installation Procedure Requirements

This section describes software installation requirements.

Installation Time

Installing the software on your target system should take approximately 5 to 10 minutes, depending on your InfoServer configuration.

Installing VXT Software on an InfoServer System
1.2 Installation Procedure Requirements

1.2.1 Prerequisite Hardware

To perform the installation, you need the following hardware:

- Software distribution device

  You need a distribution device that corresponds with the software distribution media. For example, if you have a CD–ROM software kit, you need a CD–ROM drive. You must know how to load the media supplied with the software distribution kit on the appropriate drive. The documentation for your CD–ROM drive should explain how to load the media.

- Terminal or console workstation

  You can use either a hardcopy or video terminal to communicate with the InfoServer system and respond to prompts from the VXT installation script.

  You can connect the terminal to the console port on the InfoServer. See the InfoServer system's installation manual for details. On OpenVMS systems running LAT/Master Version 5.4–2 or later, you can log into a local console and use the DCL command SET HOST/LAT to connect to the InfoServer system. You can also access the InfoServer system from a terminal connected to a LAT-capable terminal server.

1.2.2 Prerequisite Software

InfoServer Software Version 2.2 or later must be installed on your system before installing the VXT software. See your InfoServer system documentation for instructions on how to install InfoServer software.

On OpenVMS systems, you need LAT/Master Version 5.4–2 or later if you want to use the SET HOST command to connect from a local console to the InfoServer system. OpenVMS Version 5.4–3 or later includes this LAT version.

1.2.3 Determining Disk Space Requirements

The disk space requirements described in this section apply to most disks on which you load the software.

You need approximately 51,000 blocks to install all VXT software components.

To determine the number of free blocks on the system disk, enter the following command:

```
InfoServer> SHOW PARTITION DKn: FULL
```

Setting the InfoServer Prompt

After installing VXT Version 2.1 software, the InfoServer prompt is `Xterminal_server>`, unless disk access is installed. If disk access is installed, the prompt is `InfoServer>`. You can reset your prompt to a desired name after installation. In this guide, the `InfoServer>` prompt is used for examples.

1.3 Installing VXT Software

This section provides step-by-step instructions for installing VXT Version 2.1 software on an InfoServer system. The installation procedure consists of a series of questions requiring user responses, as well as informational messages. See Section 1.5 for a sample installation script.

To install the software:

1. Locate the VXT software CD–ROM.
2. If the InfoServer system is not already running, start up the system. Connect the console to the InfoServer. There are two ways to do this:
   - Connect the console to the InfoServer console port, as described in the InfoServer system documentation.
   - On OpenVMS systems running LAT/Master Version 5.4-2 or later, use the DCL command SET HOST/LAT to connect from a local console:

     ```
     $ SET HOST/LAT InfoServer_name
     ```
3. The InfoServer system prompts you for a password. See your InfoServer documentation for details on InfoServer passwords.
4. If the password is correct, the InfoServer system displays the `InfoServer>` prompt. If you used the SET HOST command, LAT software displays a connection message before the prompt.

   ```
   %LAT-S-CONNECTED, session to VXT_INFOSERVER_NAME established
   %LAT-I-TODISCON, type ^\ to disconnect the session

   DEC InfoServer 150 Version 2.2
   InfoServer>
   ```
5. Put the VXT software CD–ROM in the **source drive**.
6. Enter the following command:

   ```
   InfoServer>  UPDATE VXT DK2: DKn: Return
   ```

   VXT, the InfoServer script file, is the name of the software being installed.

   DK2 is the device name of the source drive holding the VXT software CD–ROM.

   DKn is optional and specifies the device name of the **target drive**, a read/write InfoServer disk.

   If the UPDATE command fails, check to see if you specified an incorrect name for the source drive. Remember to enter a colon (:) after the device name.
7. The procedure asks you if you want to purge older versions of VXT software, then prompts you for a password for protected data:

```
Do you want to purge older versions of this software [YES] ?  Return

This procedure installs data that  is  password  protected  for  write
access.   The  password you specify is needed to customize work groups
and terminals other than your own.

_Password for protected data [default=VXT]:  Return
```

The default password is VXT. To use the default password, simply press Return. To use a different password, enter the password and press Return.

This password is known as the VXT manager password. The person managing a system that uses VXT software needs this password to perform many configuration and font management operations. See Sections 2.10 to 2.11 for information on setting and changing the VXT manager password.

The VXT manager password applies to the following VXT files:

- All VXT system image files
- The font set file
- The VXT manager password file
- The Unregistered Terminals group file

8. An unregistered terminal work group is supplied on a newly installed InfoServer, to let terminals operate until they are registered (created) in a work group you have created. The Unregistered Terminals work group is preconfigured with factory-default settings that are read-only. The procedure gives you the option of installing the work group for unregistered terminals:

   ```
   Do you want to install the work group for unregistered terminals?
   [Yes]?  Return
   ```

9. If you have older versions of VXT software, the procedure asks you if you want to make the new version the default available on the network.

   The procedure installs two VXT system images and the VXT loader. The two images are VXT software and VXT EX software.

   - VXT software provides all VXT features and local clients, such as the terminal manager, configuration manager, and Motif window manager.
   - VXT EX (essential X server) software is a clientless version of VXT software.
   - The VXT loader downloads the selected VXT system image from the InfoServer to a terminal.

   The procedure appears to install each system image several times, because various service names are created so the images can be loaded using the MOP or LASTport protocols. Only one partition is created for each image.

```
Do you want this software to be the latest default for the network
[Yes]?  Return
```

10. The procedure installs the VXT software files, then displays a completion message. The VXT_IR files belong to the InfoReader library of online VXT documentation. VXT 2000 terminal users can access the library from the Getting Started menu in the Terminal Manager window.

```
...Proceeding to the installation phase.  No further questions will
be asked.

...Installing the VXT file VXT.PWD
...Installing the VXT file VXT_VER_021.DAT
...Installing the VXT file VXT_G_.XRM
.
.
.
%ESS-I-UPDATE, Update operation completed successfully.
InfoServer>
```

11. Enter a SAVE command, then log out of the InfoServer session:

```
InfoServer>  SAVE DK1:
%ESS-I-SAVED, Save operation completed successfully to DK1:
InfoServer>  LOGOUT
```

Note

You do not have to reboot the InfoServer system after installing the VXT software.

1.3.1 Error Recovery

If errors occur during the installation, the system displays error messages.

Installation errors can occur if any of the following conditions exist:

- Incorrect operating system version
- Incorrect version of prerequisite software
- Insufficient disc space

If the installation fails because there is insufficient disk space, the installation procedure lists some corrective steps you can take, then removes any partially installed files:

```
The VXT software installation could not be completed, because there
is insufficient disk space on the target disk DK2.  You must restart
the installation after you take one of the following steps:

     - Select an InfoServer-formatted disk other than DK2 as the target
       for the VXT installation.

     - Purge older VXT software versions by entering the PURGE VXT
       command. Alternatively, you can restart the installation and
       answer YES when the procedure asks whether you want to purge
       older versions.
```

```
      - Manually delete partitions on the target disk.  Enter the
        command SHOW PARTITION DK1 to show the list of partitions.
        You can then delete partitions in the list to make enough
        disk space for the VXT installation.

Once you have taken corrective steps, please re-enter the UPDATE VXT
command.

...Removing any partially installed files
```

1.4 Verifying the Installation

After installing the software, use the following SHOW PARTITION command to verify the installation. Note that the list of files varies according to the options you selected during the installation.

The following is a partial sample display, listing the VXT system images:

```
InfoServer>  SHOW PARTITION DK1:VXT*

Directory DK1:
Partition Name              Used/Alloc    Services
--------------------     ----------------- --------------------
VXT021.SYS                   9909/9920     VXT021.SYS [VXT_SYSTEM],
                                           VXTSV0021.SYS [VXT_SYSTEM],
                                           VXTMV0021.SYS [VXT_SYSTEM],
                                           VXT.SYS [VXT_SYSTEM],
                                           VXT021 [MOP],
                                           VXT [MOP]
VXTEX020.SYS                 2382/2384     VXTEX020.SYS [VXT_SYSTEM],
                                           VXTEX020 [MOP],
                                           VXTEX.SYS [VXT_SYSTEM],
                                           VXTEX [MOP],
VXTLDR021.SYS                 786/800      VXTLDR1 [MOP],
                                           VXTLDR [MOP],
                                           VXTLDR021 [MOP]

   .
   .
   .
InfoServer>
```

1.4.1 Determining and Reporting Problems

Software Errors

If you encounter a problem while using VXT software, report it to Digital. Depending on the nature of the problem and the type of support you have, you can take one of the following actions:

- Call Digital if your software contract or warranty agreement entitles you to telephone support.
- Submit a Software Performance Report (SPR).

Documentation Errors

If you find an error in the VXT documentation, fill out and submit the Reader's Comments form at the back of the document. Please include the section and page number where the error occurred.

You can also send your comments by electronic mail to the Internet address listed on the title page and Reader's Comments form.

1.5 Sample Installation Session

This section contains a sample installation from an InfoServer system, including all options.

```
InfoServer> UPDATE VXT DK2: DK1: Return
...Beginning installation of VXT files
...Attempting to reserve disk space for installation

**                  VXT Software V2.1 Installation                  **

If you have previously installed VXT software on this InfoServer
system, this procedure will ask you whether you want to purge older
software versions.

Answer NO if both of the following conditions are true:

o   VXT users are currently connected to the InfoServer system, and

o   You have enough disk space remaining for VXT Software V2.1.

Answer YES if this procedure has previously indicated that there is
insufficient disk space, and you decide to purge older files.


This procedure installs data that is password protected for write
access.  The password you specify is needed to customize work groups
and terminals other than your own.

_Password for protected data [default=VXT]:  Return

This procedure gives you the option of installing the work group for
unregistered terminals.  When this is installed, terminals that do not
belong to a work group can potentially save their customizations on
this InfoServer.  If you have previously installed VXT Software you
may have a customized version of this work group that you want to
keep.

Answer YES to the next question if you want unregistered terminals to
save their customizations on this InfoServer and you don't wish to
keep a previous version of this work group.

Answer NO if you wish to use another InfoServer for saving
customizations of unregistered terminals, or if you have previously
customized this work group.

Do you want to install the work group for unregistered terminals [Yes]?
   Return

VXT Software V2.1 provides two system images and the VXT loader.
The two system images are:

o  VXT021.SYS    -- VXT Software

o  VXTEX020.SYS  -- VXT Software EX (Essential X)

This procedure will appear to install the images multiple times.  This
is intentional and is done to allow them to be loaded via MOP as well
as via LASTport.  Only one partition for each image is created.


If older versions of VXT software are installed, the procedure will
ask whether you want to make this version available to the network as
the default.

Answer YES if you want terminals to run this version automatically
each time they reboot.

Answer NO if you want only those terminals specifically configured to
boot Version 021 to run this version.

If no older versions are installed, the procedure automatically makes
this version available as the default.
```

```
...Proceeding to the installation phase.  No further questions will be
   asked.

...Installing the VXT file VXT.PWD
...Installing the VXT file VXT_VER_021.DAT
...Installing the VXT file VXT_G_.XRM
...Installing the VXT file VXTLDR021
...Installing the VXT file VXT021
...Installing the VXT file VXT021
...Installing the VXT file VXT021
...Installing the VXT file VXT021
...Installing the VXT file VXTEX020
...Installing the VXT file VXTEX020
...Installing the VXT file VXT_V2_1.FNT
...Installing the VXT file VXT_IR_LIBRARY_021
...Installing the VXT file VXT_IR_USING_INFOREADER_021
...Installing the VXT file VXT_IR_SOFTWARE_RELNOTES_021
...Installing the VXT file VXT_IR_GETTING_STARTED_EN_021
...Installing the VXT file VXT_IR_GETTING_STARTED_DE_021
...Installing the VXT file VXT_IR_GETTING_STARTED_FR_021
...Installing the VXT file VXT_IR_GETTING_STARTED_IT_021
...Installing the VXT file VXT_IR_GETTING_STARTED_NL_021
...Installing the VXT file VXT_IR_GETTING_STARTED_ES_021
...Installing the VXT file VXT_IR_USER_INFO_021
...Installing the VXT file VXT_IR_SYSMAN_OVERVIEW_021
...Installing the VXT file VXT_IR_SYSMAN_INFOSERVER_021
...Installing the VXT file VXT_IR_SYSMAN_VMS_021
...Installing the VXT file VXT_IR_SYSMAN_OSF_021
...Installing the VXT file VXT_IR_SYSMAN_ULTRIX_021
...Installing the VXT file VXT_IR_SYSMAN_SUN_021
...Installing the VXT file VXT_IR_SYSMAN_HP_021
...Installing the VXT file VXT_IR_SYSMAN_IBM_021
...Installing the VXT file VXT_IR_SYSMAN_SCO_021
...Installing the VXT file VXT_IR_SYSMAN_CONFIGMAN_021
...Installing the VXT file VXT_IR_SYSMAN_APPENDIX_021
...Installing the VXT file VXT_IR_INFOSERVER_OPS_021
%ESS-I-UPDATE, Update operation completed successfully.
InfoServer>  SAVE DK1:
%ESS-I-SAVED, Save operation completed successfully to DK1:
InfoServer>  LOGOUT

DEC InfoServer 150 - Logged out
```

1.6 File Names Installed on Your System

Table 1–1 lists the possible files installed on your system by the VXT software installation.

The VXT_IR files belong to the InfoReader library of online VXT documentation. VXT 2000 terminal users can access the library from the Getting Started menu in the Terminal Manager window.

Table 1–1 Files Installed on Your System

File Name	Approximate Size (Blocks)	Description
VXT021.SYS[1]	9909	VXT system image
VXTEX020.SYS[1]	2382	VXT EX system image
VXTLDR.SYS[1]	786	VXT loader
VXTLDR1.SYS[1]	–	VXT loader
VXTLDR021.SYS[1]	–	VXT loader
VXT.PWD[1]	1	Password container for work group management
VXT_G_.XRM[1]	1	Default terminal characteristics for default work group
VXT_V2_1.FNT[1]	14469	Terminal font file
VXT_IR_LIBRARY021[2]	1	InfoReader library file
VXT_IR_SOFTWARE_RELNOTES_021[3]	366	*VXT Software Version 2.1 Release Notes*
VXT_IR_SYSMAN_OVERVIEW_021[3]	576	*VXT Software Version 2.1 System Management Overview*
VXT_IR_SYSMAN_INFOSERVER_021[3]	180	*VXT Software on InfoServer Systems*
VXT_IR_SYSMAN_VMS_021[3]	327	*VXT Software on OpenVMS Systems*
VXT_IR_SYSMAN_ULTRIX_021[3]	378	*VXT Software on ULTRIX Systems*
VXT_IR_SYSMAN_SUN_021[3]	339	*VXT Software on SunOS Systems*
VXT_IR_SYSMAN_HP_021[3]	370	*VXT Software on HP–UX Systems*
VXT_IR_SYSMAN_IBM_021[3]	312	*VXT Software on IBM AIX Systems*
VXT_IR_SYSMAN_SCO_021[3]	306	*VXT Software on SCO ODT Systems*
VXT_IR_SYSMAN_OSF_021[3]	360	*VXT Software on DEC OSF/1 AXP Systems*
VXT_IR_SYSMAN_CONFIGMAN_021[3]	3774	*VXT Software: Configuration Manager*
VXT_IR_SYSMAN_APPENDIX_021[3]	156	*VXT Software: Appendixes*
VXT_IR_USER_INFO_021[3]	9591	*VXT 2000+/VXT 2000 Windowing Terminal User Information*
VXT_IR_USING_INFOREADER_021[2]	45	*Using InfoReader*
VXT_INFOSERVER_OPS_021[3]	1008	*InfoServer System Operations Guide*
VXT_IR_GETTING_STARTED_DE_021[3]	873	*VXT Software Version 2.1 Installing and Getting Started–German*
VXT_IR_GETTING_STARTED_EN_021[3]	867	*VXT Software Version 2.1 Installing and Getting Started–English*

[1]Provided in all VXT releases for InfoServer systems.

[2]Automatically installed with InfoServer Version 2.2 and later.

[3]Installation is optional with InfoServer Version 2.2 and later.

(continued on next page)

Table 1–1 (Cont.) Files Installed on Your System

File Name	Approximate Size (Blocks)	Description
VXT_IR_GETTING_STARTED_ES_021[3]	873	*VXT Software Version 2.1 Installing and Getting Started–Spanish*
VXT_IR_GETTING_STARTED_FR_021[3]	864	*VXT Software Version 2.1 Installing and Getting Started–French*
VXT_IR_GETTING_STARTED_IT_021[3]	864	*VXT Software Version 2.1 Installing and Getting Started–Italian*
VXT_IR_GETTING_STARTED_NL_021[3]	858	*VXT Software Version 2.1 Installing and Getting Started–Dutch*

[3]Installation is optional with InfoServer Version 2.2 and later.

2

InfoServer System Management Tasks

Chapter Overview

This chapter describes general VXT system management tasks for InfoServer systems. You perform most of these tasks at the InfoServer console. The *Managing Terminals and Work Groups* section of this guide describes how to use the terminal's configuration manager to configure terminals, work groups, and font sets.

The chapter assumes that you have the VXT CD–ROM installed on your InfoServer system.

Accessing the InfoServer System

InfoServer systems do not support X sessions. Depending on your environment, there are several methods for you to access the InfoServer console interface.

- Use a local console terminal attached to the InfoServer system.
- From the Create menu in the Terminal Manager window, create a LAT terminal window using the InfoServer LAT service name. See the *VXT 2000+/VXT 2000 Windowing Terminal User Information* for more information.
- From an OpenVMS host with LAT/Master services, use the SET HOST/LAT command.
- From any terminal server that supports the LAT protocol, use the CONNECT command or an equivalent command.

Booting and Downloading the VXT System Image

The following sections describe procedures for downloading the VXT system image.

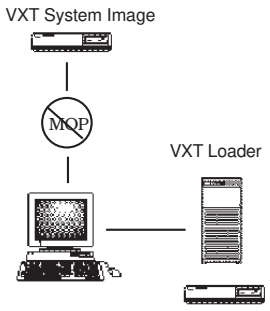
Server-based VXT 2000 windowing terminals use the VXT loader, VXTLDR, to download the system image. First, the terminal loads the VXT loader using the maintenance operations protocol (MOP). Then the VXT loader uses the LASTport/Disk protocol to download the system image.

You must load the VXT Version 2.1 loader to make use of all VXT Version 2.1 software features.

2.1 Using the VXT Loader from Hosts Other Than the InfoServer System

In some network environments, you may not be able to access the InfoServer system using MOP. In this case, you must make the VXT loader available on a supported host, so the terminal can access the VXT loader using MOP or the boot protocol/trivial file transfer protocol (BOOTP/TFTP).

2.2 Restrictions on Booting Terminals Across a Bridge



If your InfoServer system is separated from your terminals by a bridge that filters MOP requests, you cannot load VXT software directly from the InfoServer system. You must install a VXT loader file on a host system that is on the same side of the bridge as the terminal.

When you boot the terminal from a host system on the same side of the bridge as the terminal, the terminal loads the VXT loader file. Then the VXT loader loads the VXT software from the InfoServer system across the bridge. The VXT loader can communicate with the InfoServer system across the bridge, as long as the bridge does not filter the LASTport/Disk protocol used by the loader.

You install the VXT loader file in a loadable directory on your host; follow the instructions in this guide for your type of host system. The name of the VXT loader's file depends on the system:

Booting and Downloading the VXT System Image

System	VXT Loader File	Location
InfoServer system	VXTLDR	Installed automatically as part of the VXT installation.
UNIX, ULTRIX, or DEC OSF/1 AXP system	vxtldr	Located in a network-accessible location. (See your host system documentation)
OpenVMS system	VXTLDR.SYS	Located in the MOM$SYSTEM directory on an OpenVMS system that has MOP services enabled.

Note

Set up your UNIX, ULTRIX, or DEC OSF/1 AXP host system to respond to the MOP request, using the host installation and system management manuals for your operating system.

2.3 Performing Rolling Upgrades

Normally when you install new VXT software on an InfoServer system, you perform a **rolling upgrade**. A rolling upgrade means that the new software is installed without disturbing any VXT users currently using previously installed software. The next time users reboot their terminals, they roll over to the newly installed software.

To install new software as a rolling upgrade on an InfoServer system, use the InfoServer UPDATE VXT command and answer the questions (as described in Chapter 1). When asked if you want to purge older versions of VXT software, answer NO. When asked if you want to make the new software the latest default available on the network, answer YES. These answers leave the old VXT software intact, but provide the new software by default.

Update All InfoServers

When you install new VXT software on one InfoServer system and make the new software the default available on the network, you should also update the VXT software on other InfoServer systems that have older VXT software. This step prevents users from accidentally booting older VXT software when they load the default software.

2.4 Loading a Specific VXT Version

Uses

In some cases, you may want to install new VXT software without making it available by default to the whole network. For example, you may want to evaluate field test software or a new release. In these cases, you can install the new software and load it on selected terminals by requesting a specific software version.

Installation

As with rolling upgrades, you install the VXT software on the InfoServer system by using the InfoServer UPDATE VXT command (as described in Chapter 1, Installing VXT Software on an InfoServer System). In this case, you answer NO when asked if you want to make the new software the default version available on the network. This answer installs the software under a nondefault service name that contains the version number.

Configuration

To configure a terminal to load the new software, you customize the terminal's boot settings from the Terminal Manager window. See the *VXT 2000+/VXT 2000 Windowing Terminal User Information* for information about the Customize Boot dialog box.

Reinstalling as the Default Version

If you decide later that you want to make the new software the default on the network, you can reinstall the software on the InfoServer system. Answer YES when asked if you want to make the software the latest default available on the network. The second installation does not actually reinstall the VXT software if it is already present, but it creates the service names for the software so that it will boot by default on terminals that have not been customized to boot a specific version.

2.5 Downloading Host-Based VXT Software from the InfoServer System

Uses

VXT system images can operate in server-based mode or host-based mode. By default, VXT 2000 windowing terminals loaded from an InfoServer system operate in server-based mode. If you want to use host-based mode, you would normally install a VXT software host-based kit on a host system. However, since InfoServer systems can perform MOP downloads significantly faster than host systems, you may want to use an InfoServer system to load your host-based images.

Installation

You install VXT software on your InfoServer system by using the InfoServer UPDATE VXT command (as described in Chapter 1).

Configuration

If you plan on using host-based software from the InfoServer system, you must customize the terminal's boot settings. See *VXT 2000+/VXT 2000 Windowing Terminal User Information* for information about the Customize Boot dialog box.

2.5.1 Enabling MOP

You can configure the InfoServer system to act as a maintenance operation (MOP) download server. This allows the InfoServer system to receive download requests and download software to the requesting system, if the requested load image is present. You must enable this feature to use the VXT loader software (VXTLDR).

To enable or disable this feature for individual InfoServer systems, use the following command:

```
InfoServer>  SET SERVER MOP ENABLED
InfoServer>  SAVE
```

2.5.2 Downloading VXT Software Using MOP by Ethernet Address

If you have InfoServer Version 3.0 software, you can load your VXT software by specifying the terminal's Ethernet address and the VXT software image to load.

Use the InfoServer CREATE SERVICE command to create a MOP service for every terminal you want to load. Here is a sample command:

```
InfoServer>  CREATE SERVICE  MOP$08002B555555 FOR DK1:VXT CLASS MOP
InfoServer>  SAVE
```

In this example:

- MOP$08002B555555 is the Ethernet address of the VXT 2000 (or VT1300) terminal.
- DK1 is the partition where VXT software is installed.
- VXT is a partition name.

For more information, see the *InfoServer System Operation Guide Version 3.0.*

2.6 Service Names for VXT System Images

When you install VXT Version 2.1 software on an InfoServer system, a single partition is created for each system image and the VXT loader file. The system images are available under several service names, with and without version numbers (Table 2–1).

The service names with version numbers are always available. The service names without version numbers are available as soon as you make a system image the default version on the system. This allows you to load and test a new version (using the version number) on some terminals without making the new version the system default for all terminals on the network.

Partition names for system images include the .SYS extension for ease of management.

Table 2–1 Service Names for VXT System Images

Partition Name	Service Names	Service Class	Available
VXTLDR021.SYS	VXTLDR	MOP	Always
	VXTLDR	MOP	If the default version
	VXTLDR1	MOP	If the default version
VXTEX020.SYS	VXTEX020.SYS	VXT_SYSTEM	Always
	VXTEX020	MOP	Always
	VXTEX.SYS	VXT_SYSTEM	If the default version
	VXTEX	MOP	If the default version
VXT021.SYS	VXT.SYS	VXT_SYSTEM	Always
	VXT	MOP	Always
	VXT.SYS	VXT_SYSTEM	If the default version
	VXT	MOP	If the default version

2.7 Purging VXT Software Versions

To purge the VXT software versions on an InfoServer system use the PURGE VXT command. This command removes all but the latest VXT version.

Fonts

Fonts provided with the VXT kit for InfoServer systems are in compressed, portable compiled font (PCF) format.

2.8 Font Access

Server-based terminals access fonts on an InfoServer system. The terminal binds to a font set, using the LASTport/Disk protocol. By default, the terminal uses the font set provided by the VXT software installation.

VXT software provides font failover capability for InfoServer based fonts (server-based only). If the terminal loses the connection to a particular font set, the X server tries to bind to a font set with the same name on another InfoServer system.

By default, **host-based terminals** do not access fonts on an InfoServer system. These terminals use a much smaller font set downloaded with the VXT system image into the terminal's memory. However, you can customize your host-based terminals to access the VXT font set on an InfoServer system.

2.9 Font Compilation and Conversion

If your applications need fonts that are not a part of the InfoServer font distribution, you can copy other fonts from a host system to the InfoServer system.

1. Make sure all fonts are in a supported format. See the VXT system management chapter for your host operating system in this guide.
2. Collect the fonts in a central directory that can be accessed from the terminal's Configuration Manager: Font Management dialog box.
3. Create the font set on the InfoServer system by copying the set from the host. See the Using the Configuration Manager chapter for details.

Managing Terminal and Group Settings

Each terminal running server-based VXT software store its customized settings in a native resource file on an InfoServer system, accessed using the LASTport/Disk protocol. You have two options for centrally managing VXT 2000 windowing terminals on your network:

- Use your terminal's configuration manager to manage the settings in the native resource file of each terminal. You can place terminals in work groups that share settings.
- Create your own resource files on a host system and configure terminals to access the files.

See the *Managing Terminals and Work Groups* section of this guide for details.

Some resource file activities are managed by the configuration manager. Other activities are managed by the InfoServer system.

2.10 Service Passwords

When you install VXT software by using the InfoServer's UPDATE VXT command, you are prompted to provide a password that will be applied to all services created during the installation. The password applies to the following files:

- All system image files
- The font set file
- The VXT manager password file
- The Unregistered Terminals work group file

The default password is VXT. Digital recommends that you use a unique password for each InfoServer system in your installation.

2.11 Changing VXT Passwords

VXT Manager

If you forget the VXT manager password for a particular InfoServer system, perform the following steps:

1. Log in to the InfoServer system.
2. Change the password by entering the following commands at the InfoServer prompt:

```
InfoServer> SET SERVICE VXT.PWD PASSWORD password
InfoServer> SAVE
```

3. The system prompts you to enter the new password and repeat the entry for verification. The password is not echoed.

Managing Terminal and Group Settings

Work Group

If you forget the password for a work group on a particular InfoServer system, perform the following steps:

1. Log in to the InfoServer system.
2. Change the password by entering the following commands at the InfoServer prompt:

   ```
   InfoServer> SET SERVICE VXT_G_ group.XRM PASSWORD  password
   InfoServer> SAVE
   ```

   In this example, *group* is the work group name.
3. The system prompts you to enter the new password and repeat the entry for verification. The password is not echoed.

Paged Memory Requirements

If you require paged memory support, you must use the VXT loader to connect to the appropriate files on the InfoServer system. The VXT loader automatically determines the appropriate file for a particular terminal.

2.12 Restricting the Allocation of Paging Files

When a terminal has used up all of its own memory and is booted server-based, the terminal creates a paging file on an InfoServer system. The number of terminals that an InfoServer system can support depends on the InfoServer system's available disk space and the maximum size for a paging file. When all available space is used up, any terminal requesting more space will report an exception.

Defining the Size

You can choose to limit the maximum size of paging files. In this case, only terminals that try to exceed the maximum size will report an exception. To define the maximum size:

1. Log in to the InfoServer system.
2. Calculate the size of the maximum allowable paging file partition. Check the free space on the InfoServer disk, then divide that amount by the number of terminals the InfoServer system is supporting.
3. Use the InfoServer SET SERVER EXTENSION LIMIT command to set the paging file limit. For example, if your InfoServer system has 200,000 blocks of free space and supports 10 terminals, you could set the limit to 20,000:

```
InfoServer>  SET SERVER EXTENSION LIMIT 20000
InfoServer>  SAVE
```

2.13 Controlling File Creation on the InfoServer System by VXT Software

By default, the InfoServer system allows VXT software to create files remotely on the system disk (DK1). The VXT software can create terminal resource files, work group files, font files, and paging files.

Remote Device List

The InfoServer system uses a Remote Device List parameter to determine if VXT software can create files. To see an InfoServer system's Remote Device List, enter the following InfoServer command:

```
InfoServer>  SHOW SERVER
```

If a list of remote devices is empty, enable the read/write disk (normally DK1) as a remote device.

Paged Memory Requirements

Enable Remote Devices

InfoServer systems that support VXT 2000 windowing terminals must have remote devices enabled for the device containing the VXT software. Normally, this is DK1. To enable remote devices on an InfoServer system, enter the following commands:

```
InfoServer>  SET SERVER REMOTE DEVICES DK1: ENABLED
InfoServer>  SAVE
```

Saving Settings

The SAVE command saves the current settings for future startups. You also need to use this SET SERVER command when you add disks to support additional VXT 2000 windowing terminals.

If a version of the VXT software is installed on a second disk, enable it using the following commands:

```
InfoServer>  SET SERVER REMOTE DEVICES DK1,DKdisk_number: ENABLED
InfoServer>  SAVE
```

2.14 Reclaiming Paged Memory Files

The VXT 2000 windowing terminal, like any networked X window terminal, lets you make a variety of connections to various resources and services around the network. Some connections may remain active but invisible for some time after the terminal is done with them. It is a good idea to free the resources when you are finished with them.

The InfoServer system automatically reclaims paging files one hour after a VXT terminal is powered off.

2.15 LAT Responder

If you have an InfoServer system with InfoServer Version 2.2 software in the local area network (LAN) you can enable LAT responder service. Use this optional service to improve the time for connecting with non-LAT/Master services.

Enabling

To enable LAT responder service on an InfoServer system, enter the following InfoServer commands:

```
InfoServer>  SET SERVER LAT_RESPONDER ENABLED
InfoServer>  SAVE
```

The SAVE command saves the current settings for future startups.

See the *InfoServer Software Release Notes* for details.

LASTport Group Codes

A **LASTport group code** is a number assigned to an InfoServer system. The default group code setting is 0. The InfoServer system communicates only with systems that belong to the same group code.

Changing the Code

To change the group code that the InfoServer system belongs to, log in to the server and set the group code using the SET SERVER LASTPORT GROUP command. For example:

```
InfoServer> SET [SERVER] LASTPORT [GROUP] 20
InfoServer> SAVE
```

Group codes provide a way to segment the network, so only certain terminals and InfoServer systems can communicate. You can assign only one group code to an InfoServer system, in the range of 0 to 1023.

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