Ultimate
THE ULTIMATE CORP.

Ultimate PLUS
Installation and Upgrade
for HP Systems

The Ultimate Corp.
East Hanover, NJ

Version 2.2

Ultimate PLUS™ Installation and Upgrade Procedures for HP Systems
Version 2.2

Publication Information

Contents

Preface

The procedures in this guide explain how to install a new Ultimate PLUS system or upgrade from your current Ultimate PLUS system to Revision 217EA.

Use Chapter 2 to install Ultimate PLUS. You *must* use this method if you are **not currently using Ultimate PLUS on an HP system.**

Use Chapter 3 to upgrade Ultimate PLUS. You can use this method only if you are **currently using Revision 217DB or later on an HP system.**

If your system is not on one of these revisions, please call the Ultimate Technical Assistance Center (TAC) at 800-727-ULTI (in NJ call 201-887-2721).

Organization of This Guide

This guide provides specific steps for two procedures: one to install Ultimate Revision 217EA on a new system and one to upgrade Revision 217DB or later to Revision 217EA. Each procedure is presented in a separate chapter. There are also five appendices.

Chapter 1   presents an introduction to upgrading your system to Revision 217EA.

Chapter 2   describes steps to install Ultimate PLUS. You *must* use this method if you are not currently on Ultimate PLUS on an HP system.

Chapter 3   describes an upgrade method for your system. Use this method to upgrade specific files. You can use this method only if you are currently on revision 217DB or later.

Appendix A   contains a list of accounts on SYS-GEN. This list may help you locate a particular account.

Appendix B   describes three methods for verifying file-saves.

Appendix C   presents the steps necessary to set up UltiWriter.

Appendix D   describes the steps necessary to convert the Words dictionary.

Appendix E   describes the steps necessary to de-install a previous revision of Ultimate PLUS.

The end of this document contains a Reader Comment Form, a Bug Report Form, and a Suggestion Form. If you find a problem or error in this guide, or with the operating system, please complete the appropriate form. Then fold and tape the form so that Ultimate's address appears on the outside, and send it to The Ultimate Corp.

Conventions Employed in This Guide

UPPER CASE	Upper case characters indicate material that must appear exactly as shown.
lower case	Lower case characters indicate material that will vary from situation to situation (for example, filename).
{ }	Braces around a parameter indicate that inclusion of the material is optional.
RETURN or [CR]	These both indicate a physical carriage return (sometimes labeled the Enter key).
<key>	Angle brackets are used to indicate a key other than letters or numbers, for example <CTRL> or <ESC>. The only exception is that angle brackets are not used around RETURN.
enter	The word enter means to type in the required text and press RETURN.
Make selection	This typeface is used for messages and prompts displayed by the system.
bold	The same typeface bolded indicates material typed at the keyboard as opposed to screen displays provided by the system.

1 Introduction

The SYS-GEN tape of the current revision of Ultimate PLUS (217EA) can be delivered on either a half-inch, or DDS tape. The SYS-GEN tape contains two sections of UNIX® files followed by Ultimate PLUS system file saves. These files are all loaded into a UNIX file system and require a file system with a minimum of 30 Mb (30,000 blocks) of free space.

If there is no file system with the required free space, the Ultimate PLUS installation program displays the following message and the installation cannot proceed:

```
None of the file systems on the system have 30000 blocks.
Unable to select a file system for Ultimate PLUS.
```

The Ultimate PLUS database itself requires at least 30 Mb (30,000 blocks) of free space plus 0.25 Mb for each user. This space can be provided as a combination of dedicated disk sections and UNIX file systems. For performance reasons, Ultimate recommends that you use dedicated disk sections, if possible.

Note: *Each disk block in a UNIX file system as shown by the UNIX command bdf contains 1 Kb.*

If you have any questions, call Ultimate's Technical Assistance Center (TAC) for help.

Common Questions About Installing and Upgrading

What does an installation or upgrade do? It installs new operating system programs and files and restores accounts.

Who should do the installation or upgrade? Your system manager, or someone who is familiar with procedures such as loading and unloading tapes, and saving and restoring data.

When is the best time to do the installation or upgrade? When everyone is off the system, such as at night or on a weekend. But first check the hours of coverage in your maintenance contract, in case you need help from Ultimate TAC. (Extended coverage is available for an additional fee.)

Before beginning the installation, you should do a complete file-save of your current system and print the File Statistics Report. The report lists your accounts, and you may need this list when you restore your accounts.

How much time will it take? The length of time to complete the installation or upgrade depends on several factors, among them the size of your system and the number of accounts, so it is difficult to generalize. Installing involves restoring all system files and any user applications. It should take 1 hour longer than a file-restore.

Will Ultimate PLUS affect the programs I run? You should not see a difference in the programs you run with Ultimate PLUS. If you have any questions about your programs, please contact your Ultimate dealer.

If you write your own programs, please refer to the *Revision 210 Guide to New Features* for information on the changes in Revision 210.

Installation Considerations

Before you install your Ultimate PLUS system, read each item below.

- Users cannot assemble their own user exits. Appendix A of the *Ultimate PLUS System Administrator Guide for HP Systems* describes the standard Ultimate user exits.

- Make sure you are running HP-UX 8.0 or later before beginning the installation or upgrade procedures. Versions prior to HP-UX 8.0 are not supported on 217EA.

- HP-UX 8.0 and 8.02 operating systems have a tape drive problem, which must be patched before you can write to tape with Ultimate PLUS. The procedure to apply the patch is part of the installation and upgrade procedures.

- To restore accounts to Revision 217EA, the system the accounts come from *must* be on Revision 182P or 190L or higher. If your system is not on one of these revisions, please call the Ultimate Technical Assistance Center (TAC) at 800-727-ULTI (in NJ call 201-887-2721).

- If you use UltiCalc®, you must use UltiCalc Version 3.4.1 after the installation. If your system is not currently running UltiCalc 3.4.1, call Ultimate's Administration department at 201-887-9222 to order the latest revision.

- If you are restoring accounts from a revision prior to 200 and you have BASIC programs or subroutines, you should use Ultimate's CHECKBASIC utility to check them before the installation, and to compare the new object code with your old object code. You must recompile your programs after the installation. For more information on the CHECKBASIC utility, call Ultimate TAC.

- If you are restoring accounts from any revision 200 or later, all BASIC programs should be recompiled. Although programs from Revision 200 or later systems do not need to be recompiled, they will run more efficiently if they are.

- If you are restoring accounts from a revision prior to 200, you must validate any Ultimate UPDATE® or UltiKit® dictionaries after the installation. Refer to the *UltiKit User's Guide*, the *Ultimate RECALL® and Ultimate UPDATE User Guide*, or the UPD-VALIDATE command in the *Ultimate System Commands Guide* for instructions. If you are upgrading from Revision 200 or any Revision of 210, you do not need to revalidate.

- Beginning with Revision 190, duplicate D-pointers are no longer supported. Duplicate D-pointers consist either of files with the same base, or dictionary and data level files with the same base. If you have duplicate D-pointers, you must delete them. You can then create them as Q-pointers. For more information on finding and eliminating duplicate D-pointers, please call Ultimate TAC.

Deciding Which Upgrade Method to Use

You can use one of two methods to upgrade your operating system. The following paragraphs describe each method.

Installing Ultimate PLUS

Use this method to install Ultimate PLUS. You *must* use this method if you are not currently using Ultimate PLUS on an HP system.

Upgrading Ultimate PLUS

Use this method to install new Coldstart and Abs sections from the SYS-GEN, and then upgrade specific files. You can use this method if you are currently using Revision 217DB or later.

If upgrading from...	Use method...
any non-Ultimate PLUS system	Installing Ultimate PLUS
Revision 217DB or later on an HP system	Upgrading Ultimate PLUS

Notes

2 Installing Ultimate PLUS

Use this method to install Ultimate PLUS. You *must* use this method if you are **not currently using Ultimate PLUS on an HP system**.

Ultimate PLUS is installed from the UNIX shell. After Ultimate PLUS has been completely installed, you are presented with the standard Ultimate System environment.

The following steps are used to install Ultimate PLUS on a new system:

- make sure you are running HP-UX 8.0 or later before beginning the installation or upgrade procedures
- load Ultimate PLUS into UNIX directories
- configure the system
- restore Ultimate PLUS system files
- restore user accounts
- enter access codes

Before You Start

The installation procedure requires that you have the following:

- access to root login ID
- pathnames for your tape drives
- pathnames for printers
- pathnames of disk sections used by other software on your system; also path of any HP-UX boot section on disks other than the primary disk
- access code from Ultimate
- UNIX system 8.0 or later
- if you are using BISYNC, you must install the 3780PLUS driver software in the following UNIX directory (there should be at lease one megabyte of space in the /usr filesystem):

    /usr/ult_bisync

    make sure you have SYNCcable hardware connectors to attach bisync lines

Before you begin, decide where you want to install Ultimate PLUS.

- Ultimate recommends that you place Ultimate PLUS on disk sections dedicated to Ultimate PLUS; that is, disk sections that do not have UNIX file systems on them.
- If you want to use your first disk and that disk is completely configured with UNIX file systems, you can either install Ultimate PLUS on that file system, or you can re-install UNIX, specifying smaller disk sections for UNIX file systems.
- The installation procedure itself can take care of allocating dedicated disk sections. These are typically available only on disks other than the first disk.

Before continuing with the installation, you should be familiar with the information in the *Ultimate PLUS System Administrator Guide for HP Systems*, which describes the requirements for access codes, disks, frame buffers, passwords, serial devices, spooler, and tapes. The Guide also describes considerations for entering the system time and date.

Determining Disk Space

To determine space in UNIX file systems, enter the following at the UNIX prompt (#):

bdf

Information similar to the following is displayed:

```
Filesystem        kbytes   used    avail   capacity  Mounted on

/dev/dsk/c3d0s2  nnn       xxx     yyy     47%        /usr2
```

where

/dev/dsk/c3d0s2	path of device that contains file system
nnn	kbytes
xxx	number of kbytes used
yyy	number of kbytes available
47%	percentage used
/usr2	file system mounted on

For more information on this command, please refer to your UNIX documentation.

Summary of Procedures

A brief summary of Installing Ultimate PLUS is given below. In the next section, detailed instructions and reproductions of the screen display at each step are presented.

Note: *To perform the installation, you must be on a terminal other than the console; with Ultimate PLUS, the console is always reserved for UNIX system administration.*

Note: *If you are currently using a revision prior to 200, and if you have BASIC programs or subroutines, be sure to run the CHECKBASIC utility before you begin. See the document Compiling and Checking BASIC Programs.*

To load Ultimate PLUS files, follow these steps:

1. At the UNIX login prompt, login as root by entering the following:

    ```
    root
    ```

    Enter the appropriate password when prompted. The UNIX prompt (#) is displayed.

2. Change directories by entering the following:

    ```
    cd   /usr/tmp
    ```

3. Mount the Ultimate PLUS SYS-GEN tape that was supplied and put the tape drive online.

4. Load the UNIX files for Ultimate PLUS by entering the following:

    ```
    cpio   -idumvcB   <   /dev/rmt/0m
    ```

    /dev/rmt/0m is the standard path to the tape drive; if your system has a different path, please use it. (*Do not use Berkeley mode pathname.*)

    Several UNIX files needed for the installation are loaded. When the files are loaded, the UNIX command prompt is redisplayed.

5. Install Ultimate PLUS by entering the following command:

   `./INSTALL /tape.path`

   Enter the same tape path name that you specified in step 4.

6. At the warning message, press **RETURN** to continue.

7. The INSTALL program displays the default installation parameters, including the default file system for the home directory.

   a. To use the displayed file system, go on to step 8.

   b. To enter the HP-UX Resource Management menu, enter:

      1

      This is optional. It is provided in case you want to put the Ultimate PLUS account directory on a disk section which does not yet have a file system.

      Continue with step 8 when you have finished working with the HP-UX Resource Management.

   c. To change the file system, enter:

      2

8. When the correct file system has been specified, at the Enter selection prompt on the Ultimate PLUS installation screen, enter:

   y

9. The executable files are loaded and accounts installed. The password for the ultboot account is requested.

   a. To have no password for the ultboot account, press **RETURN**; go on to step 10.

   b. To specify a password for the ultboot account, enter:

      y

Enter the desired password (if just RETURN is pressed, RETURN is considered the password).

Enter the password again.

10. The password for the ultshut account is requested.

    a. To have no password for the ultshut account, press **RETURN**; go on to step 11.

    b. To specify the same password as ultboot, enter:

        s

        Go on to step 11.

    c. To specify a password for the ultshut account, enter:

        y

        Enter the desired password (if just RETURN is pressed, RETURN is considered the password).

        Enter the password again.

11. The password for the ultconf account is requested.

    a. To have no password for the ultconf account, press **RETURN**; go on to step 12.

    b. To specify the same password as ultshut, enter:

        s

        Go on to step 12.

    c. To specify a password for the ultconf account, enter:

        y

        Enter the desired password (if just RETURN is pressed, RETURN is considered the password).

        Enter the password again.

12. To change the configuration, follow this step.

    a. The following prompt is displayed:

```
Enter <h> if installing from Half-inch, or <d> if
installing from DDS?
```

    Enter the appropriate option.

    b. Then an initial configuration screen similar to the following is displayed:

    When the displayed configuration is satisfactory, go on to step 13.

    If you try to continue with less than the required minimum disk space configured, a prompt similar to the following is displayed.

```
You need to allocate at least nn Megabytes of disk space.
Press <CR> to continue.
```

Restoring System Files

13. If you are upgrading, continue with the upgrade as described in Chapter 3, step 12.

To restore the Ultimate PLUS system files, follow these steps.

After desired changes have been made to the initial configuration, to continue with the installation, at the Enter selection prompt, enter:

    y

After the installation of Ultimate PLUS is completed, the System Startup Options menu is displayed.

14. The system automatically selects F (File Restore), then requests the drive to restore from. The default is the drive that you have been using for the installation. Press **RETURN**. At this point, you should set your caps lock key.

15. Information about your system configuration is displayed. Then you are asked for your system serial number.

    a. If the system serial number is correct, press **RETURN**. (To verify the number, check the label on the back of the computer. The number is in the form HPxxx.)

    b. If it is not correct, enter the correct system serial number. The serial number and the prompt is redisplayed. Press **RETURN**.

16. At the Abs restore options prompt, press **RETURN**.

17. At the data restore option prompt, press **RETURN**. Do not remove your SYS-GEN tape.

18. The tape label information is displayed. Enter (in uppercase):

    Y

    Each file on the SYS-GEN tape is listed on your screen as it is restored.

19. The update/transaction tapes prompt is displayed. Enter:

    N

20. The copyright message is displayed. Press **RETURN**.

21. The time is requested. To accept the displayed time, press **RETURN**; otherwise, enter the appropriate time in military format (HH:MM:SS).

22. The date is requested. To accept the displayed date, press **RETURN**; otherwise, enter the appropriate date. The system accepts all standard formats.

23. At the Ultimate PLUS Logon prompt, enter:

    SYSPROG

24. The SYSPROG main menu is displayed. The Ultimate system is now installed. To go to TCL, press **RETURN**.

25. Unload the SYS-GEN tape.

There are two methods available to restore your accounts.

- the ALL-ACCOUNT-RESTORE method, as described in step 26

- the ACCOUNT-RESTORE method, as described in step 27

If you have user accounts from another system, you can restore them by using either method.

If you created your file-save tape using an Ultimate file-save, you can use either method.

If you created your file-save tape from other sources, you *must* use the ACCOUNT-RESTORE method.

26. The ALL-ACCOUNT-RESTORE method.

    a. Mount the first reel of your file-save tape. Make sure it is loaded and online. At TCL on the SYSPROG account, enter:

```
T-ATT  or  T-ATT n
```

       If you have more than one tape drive, replace *n* with the number of the drive you are using.

    b. If you are restoring accounts from a revision prior to 200E, at TCL enter:

```
ALL-ACCOUNT-RESTORE   (M
```

       If you are restoring accounts from any revision 200E or later, enter:

```
ALL-ACCOUNT-RESTORE
```

    c. At the prompt, to continue, enter:

```
Y
```

       To end, press **RETURN**.

Each account on the tape is listed on the screen. Accounts on the tape that already exist on the system are skipped.

d. If you specified the M option, at the source size prompt, enter the frame size of the source machine, in multiples of 500.

e. If your file-save tape consists of multiple reels, you are prompted to mount the next reel. When the next reel is online, at the following prompt:

```
(C)ontinue/(Q)uit?
```

Enter:

```
c
```

f. When all of your accounts have been restored, go on to step 28.

27. The ACCOUNT-RESTORE method.

a. Mount the first reel of your file-save tape. Make sure it is loaded and online. At TCL on the SYSPROG account, enter:

```
T-ATT or T-ATT n
```

If you have more than one tape drive, replace *n* with the number of the drive you are using.

b. Locate your most recent File Statistics Report, which lists all your accounts. Restore each account in turn by choosing one of the following:

If you are restoring accounts from a revision prior to 200E, at TCL enter:

```
ACCOUNT-RESTORE   accountname   (M
```

If you are restoring accounts from any revision 200E or later, enter:

```
ACCOUNT-RESTORE   accountname
```

Replace *accountname* with the name of each account you are restoring.

c. The following prompt is displayed:

```
Account name on tape:
```

Enter the name of the account you are restoring exactly as it appears on the tape.

d. To restore the account with a password, enter:

```
Y
```

To restore the account without a password, enter:

```
N
```

e. If you specified the M option, at the source size prompt, enter the frame size of the source machine, in multiples of 500.

When the account has been restored, the TCL prompt is redisplayed.

f. Repeat this procedure to restore each application account listed on the File Statistics Report. When all of the accounts have been restored, go on to step 28.

28. Now you must restore the master dictionary for each of the accounts you restored. From TCL in the SYSPROG account, enter:

```
RUN  DICT  SYSPROG-PL  UPG.NEWAC
```

The names of all accounts to be restored are displayed.

29. To continue, type C *(do not press RETURN)*. Each master dictionary is restored.

When the master dictionary of each account is restored, you will see the following message and the TCL prompt is displayed:

```
*** UPDATE COMPLETE ***
```

30. From your file-save tape, you can selectively restore any utilities of your own that you keep in the SYSPROG or SECURITY accounts.

31. If you restored an UltiWord® (WP), UltiLink™, UltiMation™, or UltiNet® account, follow these steps to restore those accounts; otherwise, go on to step 32.

    a. Remove your file-save tape. Then load your SYS-GEN tape, and make sure it is online.

    b. Make sure you are logged onto the SYSPROG account and are at TCL. Then enter:

       T-ATT or **T-ATT** *n*

       If you have more than one tape drive, replace *n* with the number of the tape drive you are using.

    c. Enter:

       UPG-ULTIS

       You will see the following message displayed:

       ```
       POSITIONING SYS-GEN TAPE AT ACCOUNT WP
       ```

       Then the files are loaded onto your system.

    d. When all the files are loaded, you will see the following message displayed:

       ```
       Finished upgrading Ultis
       ```

32. To install the UltiWord, UltiLink, UltiMation, ATP (Acceptance Test Procedure), or UltiWriter accounts for the first time, follow this step to load one or more of the accounts onto your system from the SYS-GEN tape.

Note: *If you do not want to install these accounts, or if they are already installed, go on to step 33.*

    a. Make sure the SYS-GEN tape is loaded and online.

    b. At the SYSPROG main menu, to select Load Ulti's Menu, enter:

    3

    c. Select the number of the account you want loaded on your system. To load all of the accounts, enter:

       6

    This takes some time.

    d. If you chose option 5 or 6 and already have an earlier version of UltiWriter installed, you receive the following message:

```
UltiWriter account already exists.  To upgrade
it, log to UW and RUN SYSLIB UW.UPDATE.
```

    If you receive this message, finish upgrading the Ultimate Operating System. Then refer to Appendix C for the steps to setup the new version of UltiWriter.

    e. After you have loaded the Ultis you want, the system returns you to the SYSPROG main menu. To go to TCL, press **RETURN**.

    f. Enter:

       T-UNLOAD

    Then remove your SYS-GEN tape.

33. If you are restoring accounts from a revision prior to 200D and if you use the WORDS dictionary, you *must* convert it. Follow the steps in Appendix D to convert your WORDS dictionary to the new format.

Note: *If you do not use the WORDS dictionary, or if you are restoring accounts from Revision 200D or later, you can skip this step. Go on to the next step.*

34. If you are restoring accounts from a revision prior to 200 and you desire to use UltiCalc, install UltiCalc Version 3.4.1. To install UltiCalc, refer to the instructions that came with the new UltiCalc tape.

If you do not intend to use UltiCalc or if you have already installed Version 3.4.1, go on to the next step.

35. If you restored accounts from a revision prior to 200 and have written any BASIC programs or subroutines, you *must* recompile them now. You should have used the CHECKBASIC utility before the installation to check for any compilation problems that may appear under Revision 217.

   If you restored accounts from Revision 200 or later, BASIC programs do not need to be recompiled; however, they will run more efficiently if they are.

   Refer to the document *Compiling and Checking BASIC Programs* or the *Ultimate BASIC Language Reference Guide* for information on recompiling your source code. Refer to the *Revision 210 Guide to New Features* for information on changes to the BASIC language.

36. If you are restoring accounts from a revision prior to 200 and have Ultimate UPDATE or UltiKit dictionary items, you must validate them now. Refer to the *UltiKit User's Guide*, the *Ultimate RECALL and Ultimate UPDATE User Guide*, or the UPD-VALIDATE command in the *Ultimate System Commands Guide* for instructions. If your dictionary items do not validate, call Ultimate TAC.

37. When your accounts have been restored, you must enter your access code. Log to the SECURITY account.

   Enter the password, if requested.

38. Select Enter Access Code for this machine, option **11**.

39. Enter the access code exactly as it is given.

40. If the code is correct, press **RETURN**; otherwise enter the correct code.

   In order to activate the access code, you must reboot your system. This will be done automatically after the patch has been applied.

41. If you are using UNIX version 8.0 or 8.02 (NOVA series), use the following instructions to apply a patch because of a tape drive problem with HP-UX.

    At TCL, enter:

    `:WARMSTOP`

42. At the UNIX prompt (#), enter:

    `exit`

    Then the UNIX login prompt is displayed. Move to the console terminal.

    Note: *The patch must be applied on the console terminal.*

43. At the UNIX login prompt, on the console terminal, login as root by entering the following:

    `root`

    Enter the appropriate password when prompted. The UNIX prompt is displayed.

44. Make sure all users are off the UNIX system. To see if users are logged on, enter the following at the UNIX prompt:

    `who`

    Your port should be the only port displayed in the list. If other users are logged on, do not continue until they log off.

45. Bring the system down to single user mode by entering the following:

    `/etc/init   s`

46. The following message is displayed:

```
**** SYSCON CHANGED TO /dev/console ****
#
INIT: New run level: S

INIT: SINGLE USER MODE
Is your console one of the following: a 2392A,
2393A, 2397A or 700/92? [y/n]:
```

   a. If your console is listed, enter:

```
y
```

   Go on to step 47.

   b. If your console is not listed, enter:

```
n
```

   When requested, enter the correct TERM type. Go on to the next step.

47. After the system is put into single user mode, at the UNIX prompt, enter the following to kill all processes:

`/etc/killall`

48. Enter:

`/etc/update`

Menus are displayed on the screen. For more information on the menus, refer to *Installing and Updating HP-UX HP 9000, Series 600/800 Computers* under Running the Update Program.

49. At the main menu, highlight the following choice:

```
Change Source or Destination -->
```

Press **F4** to select it.

50. Highlight the following choice:

```
From Tape Device to Local System ...
```

Press **F4** to select it.

51. The Tape Device File (source) prompt is displayed.

   a. If you are using UNIX version 8.0, enter:

      `/ult/patch/hp/phkl_0375`

   (Be sure to type a lower case L and not the number 1. Be sure
   to type the number zero and not the letter O.)

   To find the home directory, enter:

      `grep  ult:  /etc/passwd`

   b. If you are using UNIX version 8.02 (NOVA series), enter:

      `/ult/patch/hp/PHKL_0375.updt`

   (Be sure to type upper case PHKL.)

   To find the home directory, enter:

      `grep  ult:  /etc/passwd`

   c. The destination directory is the following:

      `/`

   d. Press **F4** to select it.

52. Highlight the following choice:

      `Select/View Partitions and Filesets ...`

   Press **F4** to select it.

53. The following screen is displayed:

```
          Source:/ult/patch/hp/p>    Destination: /

Selected        Name        Partition Description    Size in Kbytes
    n         PHKL_0375     tape0 EOF patch               54

    _

    _

    _

    _
```

Verify the patch and select it by replacing the n with a y under the Selected column.

Press **F4**.

54. The following prompt is displayed:

    ```
    Would you like more information?   (y or n)
    ```

    If you would like more information, enter:

    y

    Otherwise, enter:

    n

55. The following prompt is displayed:

    ```
    Start loading filesets now?
    ```

    Enter:

    y

56. The patch is applied, the system is shutdown automatically. The UNIX login prompt is displayed.

    Reboot your system from the terminal you started the upgrade with by entering the following at the UNIX login prompt (in lowercase):

    ultboot

    Then follow the instructions on booting in the *Ultimate PLUS System Administrator Guide for HP Systems*.

57. Your Ultimate PLUS system is now ready to be used.

Detailed Instructions

Use this method to install Ultimate PLUS. You *must* use this method if you are **not currently using an Ultimate PLUS on an HP system**.

Note: *To perform the installation, you must be on a terminal other than the console; with Ultimate PLUS, the console is always reserved for UNIX system administration.*

Note: *If you are currently using a revision prior to 200, and if you have BASIC programs or subroutines, be sure to run the CHECKBASIC utility before you begin. See the document Compiling and Checking BASIC Programs.*

To load Ultimate PLUS files, follow these steps:

1. At the UNIX login prompt, login as root by entering the following:

    ```
    root
    ```

    Enter the appropriate password when prompted. The UNIX root prompt (#) is displayed.

2. Change directories by entering the following:

    ```
    cd  /usr/tmp
    ```

3. Mount the Ultimate PLUS SYS-GEN tape that was supplied and put the tape drive online.

4. Load the UNIX files for Ultimate PLUS by entering the following:

    ```
    cpio  -idumvcB  <  /dev/rmt/0m
    ```

    /dev/rmt/0m is the standard path to the tape drive; if your system has a different path, please use it. (*Do not use Berkeley mode pathname.*)

Several UNIX files needed for the installation are loaded. When the files are loaded, the UNIX command prompt is redisplayed.

5. Install Ultimate PLUS by entering the following command:

   `./INSTALL  /tape.path`

   Enter the same tape path name that you specified in step 4.

6. The warning message displayed is similar to the following:

   ```
   ********************
   ****** Notice ******
   ********************

   The installation will disable all printers that are configured
   for the Unix spooler.  You may reenable them later on during
   the installation.

   Press <CR> to continue: ?
   ```

   To continue, press **RETURN**. The install disables all printers used by the UNIX spooler and assigns them directly to Ultimate PLUS. You may reenable the printers later on in the installation, if desired.

7. The INSTALL program displays the default installation parameters, including the default file system, similar to the following:

   ```
                        Ultimate PLUS Installation
                        --------------------------
   Account name                                   = ult



   1) HP-UX Resource Management
   2) Change file system for Ultimate PLUS currently    = /




   Enter selection, or <q> to quit, or <y> to continue ?
   ```

The Ultimate PLUS accountname (ult) is shown for your
information; it cannot be changed.

The file system shown for the ult account indicates where the
installation and executable files for Ultimate PLUS will be placed.

a. To use the displayed file system, go on to step 8.

b. To enter the HP-UX Resource Management menu, enter:

    1

    This is optional. It is provided in case you want to put the
    Ultimate PLUS account directory on a disk section which does
    not yet have a file system.

    For more information, go to page 51 of this chapter. Continue
    with step 8 when you have finished working with the HP-UX
    Resource Management.

c. To change the file system, enter:

    2

    A list of current file systems is displayed, similar to the
    following:

```
Ultimate PLUS requires 30000 free blocks for the installation
files.
The following file systems have enough free blocks:

 File system         Total          Used         Avail
------------------------------------------------------------
1)    /usrn          nnnnnn         xxxx         yyyyyyy
2)    /usrx          nnnnnn         xxxx         yyyyyy
         . .

            .




Enter file system name/number: <CR>=/usrn ?
```

Only those file systems that contain at least 30,000 free blocks are displayed. Enter the number or name of the desired file system. The name of the file system used for Ultimate PLUS is changed and the Ultimate PLUS installation screen is redisplayed.

8. When the correct file system has been specified, at the Enter selection prompt on the Ultimate PLUS installation screen, enter:

   y

9. The executable files are loaded and accounts installed. Then the password for the ultboot account is requested:

   ```
   Enter <y=add password for ultboot>, <CR=no password>?
   ```

   a. To have no password for the ultboot account, press **RETURN**; go on to step 10.

   b. To specify a password for the ultboot account, enter:

      y

      The following prompt requesting the password is displayed:

      ```
      * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
      Setting password for ultboot account
      * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
      New password:
      ```

      Enter the desired password (if just RETURN is pressed, RETURN is considered the password). A prompt to verify the password is displayed:

      ```
      Re-enter password:
      ```

      Enter the password again.

10. The following prompt for an ultshut account password is displayed:

    ```
    Enter <y=add password for ultshut> <s=same as ultboot> <CR=no
    password> ?
    ```

If no password was previously entered, the following prompt is
displayed instead of the prompt above:

```
Enter <y=add password for ultshut> <CR=no password> ?
```

a. To have no password for the ultshut account, press **RETURN**;
    go on to step 11.

b. To specify the same password as ultboot, enter:

    s

    Go on to step 11.

c. To specify a password for the ultshut account, enter:

    y

    The following prompt requesting the password is displayed:

    ```
    ********************************************************
    Setting password for ultshut account
    ********************************************************
    New password:
    ```

    Enter the desired password (if just RETURN is pressed, RETURN
    is considered the password). A prompt to verify the password
    is displayed:

    ```
    Re-enter password:
    ```

    Enter the password again.

11. A prompt for an ultconf account password similar to the following
    is displayed:

    ```
    Enter <y=add password for ultconf> <s=same as ultshut> <CR=no
    password> ?
    ```

    If no password was previously entered, the following prompt is
    displayed instead of the prompt above:

    ```
    Enter <y=add password for ultconf> <CR=no password> ?
    ```

a. To have no password for the ultconf account, press **RETURN**; go on to step 12.

b. To specify the same password as ultshut, enter:

    s

    Go on to step 12.

c. To specify a password for the ultconf account, enter:

    y

    The following prompt requesting the password is displayed:

    ```
    *******************************************************
    Setting password for ultconf account
    *******************************************************
    New password:
    ```

    Enter the desired password (if just RETURN is pressed, RETURN is considered the password). A prompt to verify the password is displayed:

    ```
    Re-enter password:
    ```

    Enter the password again.

Configuring the System

12. To change the configuration, follow this step.

a. The following prompt is displayed:

    ```
    Enter <h> if installing from Half-inch, or <d> if
    installing from DDS?
    ```

    Enter the appropriate option.

b. Then an initial configuration screen similar to the following is displayed:

```
                The Ultimate PLUS Initial Configuration for ult
        ------------------------------------------------------
1) Tapes:
        -/dev/rmt/0m          Half Inch       Unit 0
2) Disks:    need at least nn Megabytes
        -/dev/dsk/c5d0s10    126 Megabytes    Unit 0
3) Lines:
        - Fixed           66 1-66
        - Preferred        1 0
        - Additional      66
4) Printers (Direct and UNIX spooler) available to Ultimate PLUS
        - /dev/tty10p5          Direct connection        Unit 0
5) Printers available to UNIX Spooler
        - /dev/tty10p5          Disabled     quietjet    dumb
6) Memory configuration, buffers 20000, suitable for 125 users.
7) HP-UX Resource Configuration
8) Verify Ultimate PLUS account
9) Bisync Devices:
        --NONE CONFIGURED--


Enter selection to update, <q> to abort <y> to commit, <CR> to
continue:
```

Where possible, the installation process specifies devices. For example, the tape device used by INSTALL is always configured and is assigned as tape unit 0. The disk configuration displays the minimum disk space required for the Ultimate PLUS database; Ultimate PLUS requires 30 Mb plus 0.25 Mb per terminal. If there are any dedicated disk sections on the system, they will be displayed on the screen.

Note: In the initial configuration menu, option 9, Bisync Devices, will be displayed if the UNIX directory, /usr/ult_bisync, is present; otherwise, option 9 will not be displayed or available.

To change a displayed configuration, enter the number preceding the device. The screen for each device configuration is described on the following pages. After you have configured a device, you are returned to this screen.

When the displayed configuration is satisfactory, continue with step 13, which starts on page 2-59.

If you try to continue with less than the required minimum disk space configured, a prompt similar to the following is displayed.

```
You need to allocate at least nn Megabytes of disk space.
Press <CR> to continue.
```

Tapes

To change the half-inch tape or DDS tape configuration, enter **1** at the configuration screen. A screen similar to the following is displayed:

```
                        Tape Configuration Screen
                        -------------------------
        1) Configure Half-inch tapes
        2) Configure Cartridge Tapes
        3) Configure DDS Tapes




Enter selection, or <CR> to continue ?
```

Note: *Cartridge tape devices are not supported on this revision of Ultimate PLUS.*

Previously, it was possible for two users to define the same physical 1/2-inch tape drive at the same time by specifying different densities through their choice of drive names. Now the DENSITY=parameter of the T-ATT command can be used to specify density, so the drive is only defined once.

The following message is displayed during the initial reading of the configuration file if the drive is defined more than once:

```
        Multiple tape units defined for </dev/rmt/xb>
```

The configurator removes multiple tape units. If this happens, your tape unit numbers for the other devices will also be changed.

Half Inch Tape

To change the half inch tape configuration, enter:

    1

A screen similar to the following is displayed:

```
┌─────────────────────────────────────────────────────────────┐
│                     Half Inch Tape Volume                     │
│                     ---------------------                     │
│                                                               │
│  *1)  /dev/rmt/0m                          2)  /dev/rmt/2m     │
│                                                               │
│                 *Selected For Ultimate PLUS                   │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│  Enter item to select/deselect or <CR> to continue?          │
│                                                               │
└─────────────────────────────────────────────────────────────┘
```

Asterisks (*) indicate the tape drives that are currently configured for Ultimate PLUS.

To change the selection, enter the number preceding the tape drive. The screen is redisplayed with the new configuration.

After all changes have been made, press **RETURN**. The tape configuration screen is redisplayed. Press **RETURN** to go to the initial configuration screen.

Cartridge Tape   Cartridge tape devices are not supported on this revision of
Ultimate PLUS.

DDS Tape

To change the DDS tape configuration, enter:

3

A screen similar to the following is displayed:

```
                          DDS Tape Volumes
                          -----------------


1)  /dev/rmt/0m                              2)  /dev/rmt/2m

                     *Selected For Ultimate PLUS




    Enter item to select/deselect or <CR> to continue?
```

Asterisks (*) indicate the tape drives that are currently configured for Ultimate PLUS.

To change the selection, enter the number preceding the tape drive. The screen is redisplayed with the new configuration.

After all changes have been made, press **RETURN**. The tape configuration screen is redisplayed. Press **RETURN** to go to the initial configuration screen.

Disks

To specify the dedicated disk sections or file systems on which to install the Ultimate PLUS database, enter **2** at the initial configuration screen. A screen similar to the following is displayed:

```
                            Disk Volumes
                            ------------
Dedicated Disk Sections:
          · 1)  /dev/dsk/c5d0s15              47 Mb
            2)  /dev/dsk/c5d0s14              23 Mb
          * 3)  /dev/dsk/c5d0s10             126 Mb      126 Mb
                   .
                   .
UNIX File Systems:
            10) /                            77 Mb
            11) /usr6                         39 Mb


Enter item to select/deselect <CR> to continue ?
```

Asterisks (*) indicate the disk sections and file systems currently configured for Ultimate PLUS.

Select any combination of disk sections and, if desired, UNIX file systems that add up to the minimum required space as displayed on the initial configuration screens. (Although file systems can be specified, it is recommended that you use dedicated disk sections for Ultimate PLUS, if possible. To change file systems to dedicated disk sections or vice versa, use option 7, HP-UX Resource Configuration) For more information on disks and disk sections, see the *Ultimate PLUS System Administrator Guide for HP Systems*.

When you have specified all the disk sections and file systems you need, press **RETURN** at the Enter item prompt. The initial configuration screen is redisplayed with the new configuration.

Dedicated Disk Sections

To select a disk section, enter the number preceding the disk path. Alternatively, you can specify a device path. If the disk section is currently configured for Ultimate PLUS, it is deselected. The Disk Volumes screen is redisplayed.

Some disk sections may contain all or part of other disk sections. If you specify a disk section that overlaps an already selected disk section, a message similar to the following is displayed:

```
/dev/rdsk/c5d0s7 overlaps with /dev/rdsk/c5d0s0
Press <CR> to continue:
```

If you specify a disk section that may contain a copy of the boot section, a prompt similar to the following is displayed:

```
** Warning ** /dev/rdsk/c5d0s7 may overlap the boot section
Press 'y' to select or <CR> to cancel ?
```

If the boot section is not on the specified disk, enter:

y

Otherwise, press **RETURN**. The select prompt is redisplayed.

Caution: *If you have other software systems that use disk sections, you must not select any disk section for Ultimate PLUS that overlaps that other system's disk sections.*

File Systems

To select a file system, enter the number preceding the file system. Alternatively, you can specify its pathname.

If the file system is currently configured for Ultimate PLUS, the following prompt is displayed:

```
Press <y> to deselect or <CR> to modify ?
```

To modify the amount of the file to be used for Ultimate PLUS, press **RETURN**.

To deselect, enter:

y

The file system is deselected and the Disk Volumes screen is redisplayed.

If you are modifying a currently selected file system, or if you have selected a file system that was not previously selected, the following prompt is displayed:

```
The file system /path has a total of xx megabytes available.

Enter the size in megabytes to allocate (1-xx) <CR>=yy ?
```

Enter the number of megabytes to be allocated to the Ultimate PLUS database. The Disk Volumes screen is redisplayed with the new configuration.

If you specify a file system that contains dynamic swap space, a prompt similar to the following is displayed:

```
The file system file is being used as a dynamic swap space.
Enter <y> to allocate disk space on file or <CR> to cancel?
```

To use the file system, enter:

y

Otherwise, press **RETURN**. The select prompt is redisplayed.

Lines

To change the line (serial device) configuration, enter **3** at the initial configuration screen. A screen similar to the following is displayed:

```
        List of terminals and assigned line numbers
      -----------------------------------------------
F  1) ttyOp1   -> 0     F  2) ttyOp2 -> 1     F  3) ttyOp3 -> 2
F  4) ttyOp4   -> 3     F  5) ttyOp5 -> 4     F  6) ttyOp0 -> 5
F  7) tty1p1   -> 6     F  8) tty1p2 -> 7        . . .
.
.
.




Enter choice (e.g.3 or 2-6), <p> for previous page or <CR> ?
```

The letter F preceding the device name denotes a fixed line in Ultimate PLUS; the specified line number is reserved for the device. The letter P denotes a preferred line number; these devices are generally given the same line numbers. A device that is not preceded by a letter is an unassigned device; such a device is given any line number that is not fixed and that is not currently being used; if none exist, the device cannot logon.

The Ultimate PLUS line numbers are displayed following the device name. The console (/dev/console) cannot be assigned.

If there are more devices configured for UNIX than can be displayed on one screen, press **RETURN** to view the second screen or **p** to view the previous screen, if any.

To change the configuration, enter the number that precedes the device name; to change a range of devices, enter the first and last number to change separated by a dash, for example 2-6. A prompt similar to the following is then displayed:

```
Enter <F> for Fixed, <P> for Preferred, or <U> for Unassigned
<CR> = F ?
```

Enter the appropriate letter. The following prompt is displayed:

```
Enter line number ?
```

The default is the current assignment. Enter the line number to
assign to this device. If you entered a range, enter the number to
assign to the first device in the range; the remaining devices are
assigned to consecutive line numbers.

After the number is entered, the list of devices is redisplayed with
the new configuration.

If one of the line numbers is already assigned, a message similar to
the following is displayed:

```
The unit number overlaps with index number x
Press <CR> to continue: ?
```

The index number is the number preceding the device name in the
list of terminals.

After all devices have been configured, the List of terminals and
assigned line numbers screen is redisplayed. Press **RETURN** at the
prompt.

A prompt similar to the following is displayed:

```
Number of additional lines <CR> = xx ?
```

Additional lines can be used, for example, by a network or as
virtual lines. They can also be used by devices that have no fixed
or preferred line numbers. To change this value, enter the desired
number.

The total number of lines on the Ultimate PLUS system is
determined by the number of fixed and preferred lines plus the
number of additional lines. As long as this total does not change,
your system can be used without doing a restore.

If the total number of lines is increased or decreased, you can
continue to use the system as long as it is not shut down. Once it is
shut down, before you can log on to Ultimate PLUS, you will have
to do a full file restore.

After all the changes have been made, press **RETURN**. The initial
configuration screen is redisplayed with the new configuration.

For more information on serial devices and line numbers, see the
Ultimate PLUS System Administrator Guide for HP Systems.

Ultimate PLUS Printers

To change the Ultimate PLUS printer configuration, enter **4** at the initial configuration screen. A screen similar to the following is displayed:

```
                  Ultimate PLUS Configured Printers:
                  ----------------------------------

        Device               Type            Name      Model
-----------------------------------------------------------------
1) /dev/tty10p5              Direct




<a=add printer>/<r=remove printer>/<t=test printing>
<s=switch between UNIX spooled/Direct><CR=continue> ?
```

This screen is used to modify the printer configuration used by the Ultimate spooler in the following ways:

- add or remove printers to be used with the Ultimate PLUS
- test the configured printers
- switch the printer type between UNIX spooler and direct connection

To change the configuration, enter the appropriate letter. The options are explained below.

Printer numbers are assigned to printers in Ultimate PLUS based on the order of the printers in this list. Printer 0 is the first printer.

After all the changes have been made, press **RETURN**. The initial configuration screen is redisplayed with the new configuration.

For more information on printers and spoolers, see the *Ultimate PLUS System Administrator Guide for HP Systems*.

Adding a Printer

To add a printer, enter:

   a

A prompt similar to the following is displayed:

```
Press <d> for Direct connect, <u> for UNIX Spooler ?
```

The printer type can be one of the following:

Direct   output from the Ultimate PLUS spooler is sent
                  directly to the printer, without going through the
                  UNIX spooler

UNIX spooler   output from the Ultimate PLUS spooler is directed
                  to the UNIX spooler, which then directs output to a
                  printer

For a direct connection, enter:

   d

For a connection using the UNIX spooler, enter:

   u

If **d** is entered, a list of possible device paths for the printer is
displayed, similar to the following:

```
               List of possible device paths for the printer
      -----------------------------------------------------

   1)/dev/tty10p5   2)/dev/tty10p4   3)/dev/tty10p3   4)/dev/tty10p2
   5)/dev/tty10p1   6)/dev/tty10p0   7)/dev/tty9p5     8)/dev/tty9p4
       .
       .




   Enter choice ?
```

To select a printer, enter the number preceding the path name of the printer to be added. If you specify a printer that is already configured for Ultimate PLUS or UNIX, a message similar to the following is displayed and the cursor returns to the printer device prompt:

```
Device path /path is already being used as a direct connection.
Press <CR> to continue: ?
```

When the printer has been added, you are returned to the Ultimate PLUS Configured Printers screen.

If **u** is entered and there is more than one printer, a list of UNIX printers is displayed, similar to the following:

```
                     List of UNIX printers
                     ---------------------


        1)   ptr            disabled
                .
                .




Printer to add ?
```

To select a printer, enter the number preceding the printer to be added.

Note: *To add a printer to the list of UNIX printers, use option 6 on the initial configuration screen.*

When the printer has been added, the Ultimate PLUS Configured Printers screen is redisplayed with the the new printer.

Removing a Printer

To remove a printer from the list, enter:

    r

If there is more than one printer on the list, a prompt similar to the following is displayed. Otherwise, if there is just one printer on the list, it will be removed without this prompt.

```
Printer to remove ?
```

Enter the number preceding the device name of the printer to be removed. The Ultimate PLUS Configured Printers screen is redisplayed with the specified printer no longer on the list.

Testing a Printer

To test that the printer has been correctly configured, enter:

    t

A prompt similar to the following is displayed:

```
Printer to test ?
```

Enter the number preceding the printer to be tested. A warning similar to the following is displayed:

```
************************
****** Warning ********
************************

If the device path /dev/nnn/ is not associated with a
connected line,
The process may hang.
Are you sure you want to print <y=yes,CR=no> ?
```

To continue with the test, enter:

    y

The following is displayed on the console:

```
Verify that the ULT+ banner was printed

If not, make sure printer is online and the device path

/dev/nnn/ is correct.

Press <CR> to continue:
```

Press **RETURN** to return to the Ultimate PLUS Configured Printers screen.

Note: *If you cannot get the printer to work correctly, please call the Ultimate TAC.*

Switching a Printer

To switch the printer either from a direct connection to a UNIX spooler connection, or from a UNIX connection to a direct connection, enter:

```
s
```

A prompt similar to the following is displayed:

```
Printer to switch ?
```

Enter the number preceding the printer to be switched. The Ultimate PLUS Configured Printers screen is redisplayed with the specified printer switched to the new setting.

In addition, the UNIX spooler is disabled for the specified printer if the switch is to a direct connection; it is enabled if the switch is to the UNIX spooler.

Printers for UNIX Spooler

To change the UNIX spooler printer configuration, enter **5** at the initial configuration screen. A screen similar to the following is displayed:

```
                        UNIX Spooler Printers:
                        ----------------------

     Device                  Status          Name      Model
   ------------------------------------------------------------------
   1) /dev/tty10p5           Disabled        ptr       dumb




   Select a printer to modify or <a=add printer>/<r= remove
   printer>/<e= enable/disable>/<t-test printing><CR=continue> ?
```

This screen is used to modify the printers served by the UNIX spooler in the following ways:

- change the device path or model numbers of a printer

- add or remove printers from the UNIX spooler

- enable or disable printers

- test the printers

To change the configuration, enter the appropriate letter. The options are explained below. After all the changes have been made, press **RETURN**. The initial configuration screen is redisplayed with the new configuration.

For more information on printers and spoolers, see the *Ultimate PLUS System Administrator Guide for HP Systems*.

**Modifying a
Printer**

This option allows you to change the device path or model associated with a printer name. The printer must be disabled before it can be modified.

To modify a printer, enter the number preceding the device path. A screen similar to the following, showing all the possible printer device paths, is displayed:

```
              List of possible device paths for the printer
              ------------------------------------------------

  1)/dev/tty10p5   2)/dev/tty10p4   3)/dev/tty10p3   4)/dev/tty10p2
  5)/dev/tty10p1   6)/dev/tty10p0   7)/dev/tty9p5    8)/dev/tty9p4
         .
         .




  Enter choice <CR> = /dev/tty--- ?
```

The default device is the one currently assigned to the printer name. To accept the default, press **RETURN**. To change the device, enter the number preceding the device path. Alternatively, you can specify a device path.

A screen similar to the following, showing all the possible printer models, is displayed:

```
                    List of printer models:
                    -----------------------

1)thinkjet      2)ruggedwriter  3)rmodel        4)quietjet
5)paintjet      6)laserjet      7)hp7596a       8)hp7595a
   .
   .




Enter choice <CR> = current ?
```

The default model is the one currently assigned to the printer name.
To accept the default, press **RETURN**. To specify a different
model, enter the number preceding the model name.

The printer is reconfigured with the specified information, then the
UNIX Spooler Printers screen is redisplayed with modified
information for the specified device.

Adding a Printer

To add a printer, enter:

a

A screen similar to the following, showing all the possible printer
device paths, is displayed:

```
                    List of possible device paths for the printer
            -----------------------------------------------

   1)/dev/tty10p5   2)/dev/tty10p4   3)/dev/tty10p3   4)/dev/tty10p2
   5)/dev/tty10p1   6)/dev/tty10p0   7)/dev/tty9p5    8)/dev/tty9p4
            .
            .




   Enter choice ?
```

Enter the number preceding the device path to be added.
Alternatively, you can specify a device path.

A screen similar to the following, showing all the possible printer
models, is displayed:

```
                           List of printer models
                    -----------------------

   1)thinkjet       2)ruggedwriter   3)rmodel        4)quietjet
   5)paintjet       6)laserjet       7)hp7596a       8)dumb
            .
            .




   Enter choice <CR> = dumb ?
```

The default model name is *dumb*. To accept the default, press
RETURN. To specify a different model, enter the number
preceding the model name. A prompt similar to the following is
displayed:

```
        Printer name <CR> = quietjet
```

The default name is the model name followed by a sequence number. To accept the default, press **RETURN**. To specify a different name, enter the desired name.

The following message is displayed:

```
scheduler stopped
scheduler is running
Press <CR> to continue: ?
```

Press **RETURN**. The UNIX Spooler Printers Screen is redisplayed.

The printer is added to the list of UNIX spoolers, then the UNIX Spooler Printers screen is redisplayed with the new printer.

Removing a Printer

A printer must be disabled before it can be removed. If the printer to be removed is not disabled, select the enable/disable option before selecting the remove option.

To remove a printer from the list, enter:

```
r
```

If there is more than one printer on the list, a prompt similar to the following is displayed. Otherwise, if there is just one printer on the list, it will be removed without this prompt.

```
Printer to remove ?
```

Enter the number preceding the device name of printer to be removed. The list is redisplayed with the specified printer no longer on the list.

The following message is displayed:

```
scheduler stopped
scheduler is running
```

Enabling or Disabling a Printer

If the status of a printer is enabled, jobs sent to it can be printed. If the status is disabled, jobs sent to it are queued and printed when the printer is enabled.

To change the status of a printer, enter:

```
e
```

A prompt similar to the following is displayed:

```
Printer to enable/disable ?
```

Enter the number preceding the device name of printer whose status is to be changed. The status is changed and the list is redisplayed showing the new status.

Testing a Printer

To test that the printer has been correctly configured, enter:

```
t
```

A prompt similar to the following is displayed:

```
Printer to test ?
```

Enter the number preceding the printer to be tested. A warning similar to the following is displayed:

```
*****************************
********* Warning *********
*****************************

If the device path /dev/nnn/ is not associated with a
connected line. The process may hang.
Are you sure you want to print <y = yes, CR = no> ?
```

To continue with the test, enter:

```
y
```

The following is displayed on the console:

```
Verify that the Ultimate PLUS banner was printed
If not, make sure printer is online and the device path
/dev/nnn/ is correct.
Press <CR> to continue:
```

Press **RETURN** to return to the Ultimate PLUS Configured Printers
screen.

Note: *If you cannot get the printer to work correctly, please call the*
         Ultimate TAC.

Memory

To change the amount of memory in the shared memory segment, enter **6** at the initial configuration screen. A screen similar to the following is displayed:

```
                  The Ultimate PLUS Memory Configuration
         -------------------------------------------------
         Free Memory On The System     = 26.96 Megabytes
         Shared Memory Segment Limit   = 64.00 Megabytes


|----------------------------------------------------------------------|
|  Description            |Active|Frame    |Resulting Shared|Estimate of |
|                         |Users |Buffers  |Memory Segment  |Free Memory |
|                         :      |Assigned|Size (Mb)       |Needed (Mb) |
|----------------------------------------------------------------------|
|Maximum Recommended      |180   |28800    |28.62           |64.31       |
|----------------------------------------------------------------------|
|Maximum Possible         |406   |65024    |63.94           |136.26      |
|----------------------------------------------------------------------|
|CURRENT CONFIGURATION    |125   |20000    |20.03           |46.80       |
|----------------------------------------------------------------------|


Enter estimated users at peak activity or <CR=125> to continue ?
```

The current configuration indicates the estimated number of users for Ultimate PLUS. This number is used to calculate the number of frame buffers required and the size of the shared memory segment.

To change the amount of memory in the shared memory segment, enter the estimated number of users for the system. The number must be less than the maximum possible users. The system then calculates the number of frames buffers based on the number of users * 160. The minimum number of frame buffers that can be configured is 1024. If you specify a number of users less than 7, the number of frame buffers is automatically set at 1024.

Note: *The number of users on this screen is used to determine memory configuration. It is independent of the number of lines that are configured for the system, and of the authorized number of users for your system.*

If desired, you can specify the number of frame buffers directly by entering the number preceded by the letter b; for example, to specify 6000 frame buffers, enter the following:

```
b6000
```

If the estimate of free memory needed is greater than the free memory on the system, swapping may occur when the system is heavily loaded.

If the number of buffers specified exceeds the recommended maximum, a message similar to the following is displayed:

```
*Warning* : The current system memory will not efficiently
support all the estimated users.
```

After all the changes have been made, press **RETURN**. The initial configuration screen is redisplayed with the new configuration.

For more information on memory requirements, see the *Ultimate PLUS System Administrator Guide for HP Systems*.

HP-UX Resource Configuration

To change the HP-UX resource configuration, enter **7** at the initial configuration screen. A screen similar to the following is displayed:

```
                    HP-UX  Resource Configuration Screen
                    ------------------------------------
1) Convert a File System to a Dedicated Disk Section
2) Convert a Dedicated Disk Section to a File System

















Enter selection, or <CR> to continue ?
```

File systems can be converted to dedicated disk sections, or dedicated disk sections can be converted to file systems.

After the changes have been made, press **RETURN** to return to the initial configuration screen. To configure the newly converted files or disks for Ultimate PLUS, use option 3 (Disks) from the initial configuration screen.

Converting a File System

To convert a file system to a dedicated disk section, enter the following:

    1

A screen similar to the following is displayed:

```
                       List of file systems
                       --------------------

1) /                  2) /usr6                 3) /usr5












Enter choice, or <CR> ?
```

To select a file system, enter the number preceding the file system. Alternatively, you can specify its pathname. The following is displayed:

```
                ****************
                **** WARNING ****
                ****************

  This operation will destroy the data on the file system /path

  Are you sure, press <y> to convert or <CR> to cancel ?
```

To confirm that the file system is to be converted, enter:

    y

The file system is unmounted and its entries removed from the /etc/mnttab and /etc/checklist files, and the disk section is added to the list of dedicated disk sections available for Ultimate PLUS. When the file system has been unmounted, the following prompt is displayed:

```
  Press <CR> to continue:
```

Press **RETURN**. The HP-UX Resource Configuration Screen is redisplayed.

If you specify a file system that contains dynamic swap space, a prompt similar to the following is displayed:

```
The file system /path is being used as dynamic swap space.
Press <CR> to continue:
```

Press **RETURN**. The HP-UX Resource Configuration Screen is redisplayed.

If you specify a file system that is configured for Ultimate PLUS, a prompt similar to the following is displayed:

```
The file system /path is being used by Ultimate PLUS.
Press <CR> to continue:
```

Press **RETURN**. The HP-UX Resource Configuration Screen is redisplayed. To change the file system, you must first deselect it, using option 3 (Disks). Then re-execute this option.

Converting a Dedicated Disk Section

To create and mount a file system on a disk section, enter the following:

2

A screen similar to the following is displayed:

```
                    List of Dedicated Disk Sections
                    -------------------------------
      1)  /dev/dsk/c5d0s15
      2)  /dev/dsk/c5d0s14
      3)  /dev/dsk/c5d0s10

       .

       .




 Enter choice, or <CR> ?
```

To select a disk section, enter the number preceding the disk
section. Alternatively, you can specify its pathname. The
following is displayed:

```
                    ****************
                    **** WARNING ****
                    ****************
   This operation will destroy the data on the disk /dev/dsk/path
   Are you sure, press <y> to convert or <CR> to cancel ?
```

To confirm that the file system is to be created and mounted, enter:

y

The file system is created and mounted using a name of the form
/ultn. Entries showing both the filename and disk section path are
added to the /etc/mnttab and /etc/checklist files. At the continue
prompt, press **RETURN**. The HP-UX Resource Configuration
Screen is redisplayed.

Account Verification

To verify the UNIX files used for Ultimate PLUS, or to reset their permissions and ownerships to the default, enter **8** at the initial configuration screen. A screen similar to the following is displayed:

```
                  Ultimate PLUS Account Validation Screen
                  ----------------------------------------
        1) Validate checksum for all files
        2) Refresh the permission/ownership of all files












Enter selection, or <CR> to continue ?
```

This screen is used to verify the checksums for all the UNIX files used for Ultimate PLUS, or to reset the permissions and ownerships of all the UNIX files used for Ultimate PLUS.

To verify the checksums, enter:

1

The checksums of all the UNIX files used for Ultimate PLUS are verified; the names of the files are displayed. If there are no errors, the following prompt is displayed:

```
        Press <CR> to continue:
```

Press **RETURN**. The Ultimate PLUS Account Validation Screen is redisplayed.

If an error is found, the filename and file type are displayed, similar to the following:

```
Warning: Inconsistent checksum for file filename xxx yyy
Press <CR> to continue:
```

The checksum should be xxx; however, the actual checksum is yyy. To continue checking the files, press **RETURN**.

If an error is found, call Ultimate TAC immediately. Do not attempt to use Ultimate PLUS.

To check the permissions and ownerships of all the UNIX files used for Ultimate PLUS and reset them to the defaults, enter:

2

The permissions and ownerships are reset, then the following prompt is displayed:

```
Press <CR> to continue: ?
```

Press **RETURN**. The Ultimate PLUS Account Validation Screen is redisplayed.

Bisync Configuration

Note: *Before changing the Bisync Configuration, the UNIX directory, /usr/ult_bisync, must be present; otherwise, option 9 will not be available.*

To change the Bisync Configuration, enter **9** at the initial configuration screen. A screen similar to the following is displayed:

```
                    Bisync Configuration Screen
                    ---------------------------


The bisync server directory location:          /usr/ult_bisync
Number of bisync device(s) configured:         0















Enter <a> to add, or <CR> to continue ?
```

Before using BISYNC, you must install the 3780PLUS driver software. See Chapter 3 of the *Ultimate PLUS System Administrator Guide for HP Systems* for installation procedures.

To add to the Bisync Configuration Screen, enter:

a

A screen similar to the following is displayed:

```
                    List of possible device paths for bisync
              ------------------------------------------------

        1) /dev/tty0p1         2) /dev/tty0p2          3) /dev/tty0p3
        4) /dev/tty0p4         5) /dev/tty0p5          6) /dev/tty0p6
           .
           .




        Enter choice, <q> to stop display or <CR> to continue ?
```

To continue to the next screen, press **RETURN**.

To select a device path, enter the number preceding the device path. The Bisync Configuration screen is redisplayed with the change.

If you choose a device path that is already in use, the following prompt will be displayed:

```
        The port </dev/tty0p5> is in use by Ultimate PLUS
        Press <CR> to continue: ?
```

Press **RETURN**. The Bisync Configuration screen is redisplayed.

To stop the display, enter:

```
        q
```

The following prompt is be displayed:

```
        Enter choice ?
```

The Bisync Configuration screen is redisplayed with the change. A screen similar to the following is displayed:

```
                     Bisync Configuration Screen
                     ----------------------------

The bisync server directory location:          /usr/ult_bisync
Number of bisync device(s) configured:          1

        1) /dev/tty0p5












Enter <a> to add, selection number to delete or <CR>to continue?
```

After the changes have been made, press **RETURN** to return to the initial configuration screen. For more information on Bisynchronous Communications, please see the *Ultimate PLUS System Administrator Guide for HP Systems*.

Restoring System Files

13. If you are upgrading, continue with the upgrade as described in Chapter 3, step 12.

   To restore the Ultimate PLUS system files, follow these steps.

   After desired changes have been made to the initial configuration, to continue with the installation, at the Enter selection prompt, enter:

   y

   Installation messages are displayed. If UNIX file systems have been specified as part of the disk configuration, those files are pre-allocated; this could take several minutes.

After the installation of Ultimate PLUS is completed, the System Startup Options menu is displayed.

```
This is the Ultimate PLUS System



 System Startup Options

 (C)oldstart
 (F)ile Restore
 (Q)uit Ultimate PLUS

 Enter Option F

0 /dev/rmt/0m
1 /dev/rmt/1m
2 ./sysgen

Please select the tape device to use (<CR>=0):
```

14. The system automatically selects F (File Restore), then requests the drive to restore from. The default is the drive that you have been using for the installation. (The device called ./sysgen is actually a disk directory with files. For more information, see the tape discussion in the *Ultimate PLUS System Administrator Guide for HP Systems*.)

    Press **RETURN**. At this point, you should set your caps lock key.

15. Information about your system configuration is displayed. Then you are asked for your system serial number.

```
Ultimate PLUS abs restore proceeding, please wait...

001  002  ...  010

Flusher started successfully (pid = xxx)
Ultimate PLUS port 0 is assigned to /dev/ttyc3d10
Write density set to 1600
Tape n attached
Block size: nnnn


Hardware serial number is yyyyyyyy


System serial # is xxxx

Enter system serial # or press <CR> to accept
```

   a. If the system serial number is correct, press **RETURN**. (To verify the number, check the label on the back of the computer. The number is in the form HPxxx.)

   b. If it is not correct, enter the correct system serial number. The serial number and the prompt is redisplayed. Press **RETURN**.

16. The Abs restore option screen is displayed:

```
Abs restore option:

    n - Skip tape forward 'n' files

Type option and press <CR>, or just press <CR> to
continue:
```

Press **RETURN** to perform the Abs restore.

17. The Abs section is restored, then data restore options are displayed.

```
A127
Ultimate PLUS port 0 starting up port n...


Spooler started


Data restore options:


    I - Inhibit reallocation
    M - Modulo adjust
    U - Unload tape
    n - Skip tape forward 'n' files
    Tn- Switch to tape drive 'n'


Type option and press <CR>, or just press <CR> to
continue:
```

To continue, press **RETURN**.

18. The tape label information similar to the following is displayed:

```
Lnnnn# time date DATA SYS-GEN              ~01
Seq# of this data tape:     0     0     0     0
Is this the right tape (Y/N)?
```

Enter **Y** (in uppercase).

Each file on the SYS-GEN tape is listed on your screen as it is restored.

19. When all files have been restored, the following prompt is displayed:

```
Update/transaction tapes (Y/N)?
```

Enter:

N

20. The copyright message is displayed:

```
Saving Monitor

date time   Logon please:
<<< Copyright 1989, The Ultimate Corp., as an unpublished       >>>
<<< work. All Rights Reserved. This work is the property of      >>>
<<< and embodies trade secrets and confidential information      >>>
<<< proprietary to the Ultimate Corp.and may not be reproduced >>>
<<< copied, used, disclosed, transferred, adapted, or modified >>>
<<< without the express written approval of the Ultimate Corp. >>>
<<<                                                              >>>
<<<    Welcome to the Ultimate PLUS Operating Environment        >>>
<<<    time             Release 10 Rev 217EA          date       >>>

This is the Cold-Start Procedure
    Enter <CR> to continue
```

Press **RETURN**.

21. Secondary workspaces are linked. The time is requested.

```
Linking secondary TCL workspaces

[294] 0 additional task workspaces initialized

time   date

Time =
```

To accept the displayed time, press **RETURN**; otherwise, enter the appropriate time in military format (HH:MM:SS). For example, enter 5 pm as 17:00:00.

22. The date is requested.

```
17:00:00
      time    date
Date =
```

To accept the displayed date, press **RETURN**; otherwise, enter the
appropriate date. The system accepts all standard date formats.

23. A screen similar to the following is displayed:

```
<<<--Load terminal definitions-->>>
SP-STARTLPTR 0,0,1,P0
[1118]
      The printer control block has been initialized.
      The correct paper and LPI settings must have been
      previously set to insure proper printing.

!-----------------------------------------------------------------!
!                                                                 !
!  NOTICE -=*=- NOTICE -=*=- NOTICE -=*=- NOTICE -=*=- NOTICE     !
!                                                                 !
!  The correct access code must be entered before the Ultimate   !
!     Operating System will run on this CPU.  Please use the      !
!     ACCESS-CODE function in the SECURITY account to enter       !
!     this machine's Access Code; then reboot.                    !
!                                                                 !
!  NOTICE -=*=- NOTICE -=*=- NOTICE -=*=- NOTICE -=*=- NOTICE     !
!                                                                 !
!-----------------------------------------------------------------!

<Connect time = x mins.;CPU=n units;lptr pages=0>
<Logged off at time   date       >

date  time  Ultimate PLUS Logon please:
```

Ignore the security code violation notice for now. You will be
instructed on how to enter the access code in step 37.

At the Ultimate PLUS Logon prompt, enter:

SYSPROG

24. The SYSPROG main menu is displayed. The Ultimate system is now installed. To go to TCL, press **RETURN**.

25. Unload the SYS-GEN tape.

Restoring Your Accounts and Files

Now that your system is installed, you can restore your accounts. You need your file-save tape and the current File Statistics Report.

There are two methods available to restore your accounts:

• the ALL-ACCOUNT-RESTORE method, as described in step 26

• the ACCOUNT-RESTORE method, as described in step 27

If you have user accounts from another system, you can restore them by using either method.

If you created your file-save tape using an Ultimate file-save, you can use either method.

If you created your file-save tape from other sources, you *must* use the ACCOUNT-RESTORE method.

26. The ALL-ACCOUNT-RESTORE method.

    a. Mount the first reel of your file-save tape. Make sure it is loaded and online. At TCL on the SYSPROG account, enter:

        `T-ATT` or `T-ATT` `n`

    If you have more than one tape drive, replace *n* with the number of the drive you are using.

    b. If you are restoring accounts from a revision prior to 200E, at TCL enter:

        `ALL-ACCOUNT-RESTORE` `(M`

    If you are restoring accounts from any revision 200E or later, enter:

        `ALL-ACCOUNT-RESTORE`

The following screen is displayed.

```
This program restores all accounts from the FILE-SAVE
tape that are not already on the system.

THIS PROGRAM ONLY ACCEPTS FILE-SAVE TAPES MADE FROM:
 - THE FILE-SAVE PROC SUPPLIED BY THE ULTIMATE CORP
 - OR SELECTION 1 (File-save) IN THE SYSPROG MENU
      SUPPLIED BY THE ULTIMATE CORP

WARNING - THIS PROGRAM WILL NOT WORK WITH TAPES MADE
FROM ANY OTHER SOURCES.

Enter (Y)es to continue or <CR> to END:
```

c. At the prompt, to continue, enter:

   Y

   To end, press **RETURN**.

   If you choose to continue, each account on the tape is listed on the screen as it is restored. Accounts on the tape that already exist on the system are skipped.

d. If you specified the M option, at the source size prompt, enter the frame size of the source machine, in multiples of 500.

e. If your file-save tape consists of multiple reels, you are prompted to mount the next reel. When the next reel is online, at the following prompt:

   ```
   (C)ontinue/(Q)uit?
   ```

   Enter:

   C

f. When all of your accounts have been restored, the file-save tape is rewound and unloaded. You will see the following message:

   ```
   Account restores are complete.  Now unload tape.
   ```

   Remove your file-save tape and go on to step 28.

27. The ACCOUNT-RESTORE method.

    a. Mount the first reel of your file-save tape. Make sure it is loaded and online. At TCL on the SYSPROG account, enter:

```
T-ATT  or  T-ATT  n
```

       If you have more than one tape drive, replace *n* with the number of the drive you are using.

    b. Locate your most recent File Statistics Report, which lists all your accounts. Restore each account in turn by choosing one of the following:

       If you are restoring accounts from a revision prior to 200E, at TCL enter:

```
ACCOUNT-RESTORE  accountname  (M
```

       If you are restoring accounts from any revision 200E or later, enter:

```
ACCOUNT-RESTORE  accountname
```

       Replace *accountname* with the name of each account you are restoring.

    c. Next the following prompt is displayed:

```
Account name on tape:
```

       Enter the name of the account you are restoring exactly as it appears on the tape.

    d. Then the following prompt is displayed:

```
Password(s) (Y/N)?
```

       To restore the account with a password, enter:

```
Y
```

To restore the account without a password, enter:

N

If you chose Y, you are asked:

```
Password(s) or <CR> (use password(s) from tape):
```

To use the password stored on the tape, if there is one, press **RETURN**; to specify a new password, enter the password. (The new password does not appear on the screen.) If you enter a new password, you are asked the following:

```
Re-enter password(s) to confirm:
```

Type the password again and press **RETURN**.

e. If you specified the M option, at the source size prompt, enter the frame size of the source machine, in multiples of 500.

When the account has been restored, the TCL prompt is redisplayed.

f. Repeat this procedure to restore each application account listed on the File Statistics Report. When all of the accounts have been restored, go on to step 28.

28. Now you must restore the master dictionary for each of the accounts you restored. From TCL in the SYSPROG account, enter:

```
RUN  DICT  SYSPROG-PL  UPG.NEWAC
```

The names of all accounts to be restored are displayed, similar to the following.

```
*** USER MASTER DICTIONARY UPGRADE PROCEDURE ***

The following accounts are to be upgraded:
ULTIMATION
WP
TRAINING
ULTILINK
GAMES
.
.
.

(C)ontinue or (Q)uit?
```

29. To continue, type C *(do not press RETURN)*. Each master dictionary is restored.

    When the master dictionary of each account is restored, you will see the following message and the TCL prompt is displayed:

    ```
    *** UPDATE COMPLETE ***
    ```

Note: *If you get an error message such as* Update rejected - D/CC/CL *pointer, it may be because the account listed directly above the message contains a file that has the same name as an Ultimate command. If you are not sure of the cause of the message, call Ultimate TAC.*

30. From your file-save tape, you can selectively restore any utilities of your own that you keep in the SYSPROG or SECURITY accounts.

31. If you restored an UltiWord (WP), UltiLink, UltiMation, or UltiNet account, follow these steps to restore those accounts; otherwise, go on to step 32.

    a. Remove your file-save tape. Then load your SYS-GEN tape, and make sure it is online.

    b. Make sure you are logged onto the SYSPROG account and are at TCL. Then enter:

       T-ATT or **T-ATT** *n*

If you have more than one tape drive, replace *n* with the number of the tape drive you are using.

c. Enter:

UPG-ULTIS

You will see the following message:

```
POSITIONING SYS-GEN TAPE AT ACCOUNT WP
```

Then the files are loaded onto your system.

d. When all the files are loaded, you will see the following message displayed:

```
Finished upgrading Ultis
```

32. To install the UltiWord, UltiLink, UltiMation, ATP (Acceptance Test Procedure), or UltiWriter accounts for the first time, follow this step to load one or more of the accounts onto your system from the SYS-GEN tape.

Note: *If you do not want to install these accounts, or if they are already installed, go on to step 33.*

a. Make sure the SYS-GEN tape is loaded and online.

b. At the SYSPROG main menu, to select Load Ulti's Menu, enter:

3

The following screen is displayed.

```
LOAD ULTI's MENU

Load from SYSGEN tape

1.  UltiWord

2.  UltiLink

3.  UltiMation

4.  ATP

5.  UltiWriter

6.  Restore All Ultis

Press RETURN for main menu

        ENTER SELECTION - ?
```

c. Select the number of the account you want loaded on your system. To load all of the accounts, enter:

> 6

This takes some time.

d. If you chose option 5 or 6 and already have an earlier version of UltiWriter installed, you receive the following message:

> UltiWriter account already exists. To upgrade
> it, log to UW and RUN SYSLIB UW.UPDATE.

If you receive this message, finish upgrading the Ultimate Operating System. Then refer to Appendix C for the steps to setup the new version of UltiWriter.

e. After you have loaded the Ultis you want, the system returns you to the SYSPROG main menu. To go to TCL, press **RETURN**.

f. Enter:

> **T-UNLOAD**

Then remove your SYS-GEN tape.

For information on the Ultis you have just loaded, please refer to the *UltiWord Reference and Training Guide*, the *UltiLink User's Guide*, the *UltiMation User's Guide,* and the *UltiWriter User's Guide.* (The ATP account contains Acceptance Test Procedures, and should only be used when instructed by Ultimate TAC.)

33. If you are restoring accounts from a revision prior to 200D and if you use the WORDS dictionary, you *must* convert it. UltiWord's spell-checking feature uses a dictionary called WORDS. WORDS was previously stored in the WORDS account as a master dictionary entry, but beginning with Revision 200D, the WORDS dictionary must be stored as a data-level file. Follow the steps in Appendix D to convert your WORDS dictionary to the new format.

   Note: *If you do not use the WORDS dictionary, or if you are restoring accounts from Revision 200D or later, you can skip this step. Go on to the next step.*

34. If you are restoring accounts from a revision prior to 200 and you desire to use UltiCalc, install UltiCalc Version 3.4.1. To install UltiCalc, refer to the instructions that came with the new UltiCalc tape.

   If you do not intend to use UltiCalc or if you have already installed Version 3.4.1, go on to the next step.

35. If you restored accounts from a revision prior to 200 and have written any BASIC programs or subroutines, you *must* recompile them now. You should have used the CHECKBASIC utility before the installation to check for any compilation problems that may appear under Revision 217.

   If you restored accounts from Revision 200 or later, BASIC programs do not need to be recompiled; however, they will run more efficiently if they are.

Refer to the document *Compiling and Checking BASIC Programs* or the *Ultimate BASIC Language Reference Guide* for information on recompiling your source code. Refer to the *Revision 210 Guide to New Features* for information on changes to the BASIC language.

36. If you are restoring accounts from a revision prior to 200 and have Ultimate UPDATE or UltiKit dictionary items, you must validate them now. Refer to the *UltiKit User's Guide*, the *Ultimate RECALL and Ultimate UPDATE User Guide*, or the UPD-VALIDATE command in the *Ultimate System Commands Guide* for instructions. If your dictionary items do not validate, call Ultimate TAC.

Entering Access Codes

37. When your accounts have been upgraded, you must enter your access code. To do this, you must be on line 0 and on the SECURITY account. To log to the SECURITY account, enter the following at TCL:

```
LOGTO  SECURITY
```

Enter the password, if requested.

38. A menu similar to the following is displayed:

```
****************************************************************
*              The ULTIMATE Accounts Manager               *
*              Version 1.6              10/06/90            *
****************************************************************
1.    System Security Specifications
2.    Terminal Security Specifications
3.    Create/Update an Account
4.    Rename an Account
5.    Account Save to Tape
6.    Account Restore from Tape
7.    Delete an Account
8.    Display Terminal Logon Failures
9.    Security System Documentation
10.   Delete Q-pointer Account
11.   Enter Access Code for this machine

Enter Selection, 'TCL', or 'OFF'
```

Select Enter Access Code for this machine, option **11**.

39. The following is displayed:

```
While this program does check the general format of an access
code entered, it does NOT verify that the code given is valid.
Please, make sure that the code is entered exactly as received
from Ultimate Support.

Enter access code: _____
```

Enter the access code exactly as it is given.

40. The following is displayed:

```
* Note:  the date displayed with the access code is the date
the code was entered.  It is NOT an expiration date!
Cpu id:  nnnnnnnnn
1) date        access code              <-- current access code --<
Enter new access code or <CR>:
```

If the code is correct, press **RETURN**; otherwise enter the correct code.

In order to activate the access code, you must reboot your system. This will be done automatically after the patch has been applied.

Applying the Patch

41. If you are using UNIX version 8.0 or 8.02 (NOVA series), use the following instructions to apply a patch because of a tape drive problem with HP-UX.

    At TCL, enter:

    ```
    :WARMSTOP
    ```

42. At the UNIX prompt, enter:

    ```
    exit
    ```

    Then the UNIX login prompt is displayed. Move to the console terminal.

    Note: The patch must be applied on the console terminal.

43. At the UNIX login prompt, on the console terminal, login as root by entering the following:

    ```
    root
    ```

    Enter the appropriate password when prompted. The UNIX prompt is displayed.

44. Make sure all users are off the UNIX system. To see if users are logged on, enter the following at the UNIX prompt:

    ```
    who
    ```

    Your port should be the only port displayed in the list. If other users are logged on, do not continue until they log off.

45. Bring the system down to single user mode by entering the following:

    ```
    /etc/init  s
    ```

46. A message similar to the following is displayed:

    ```
    **** SYSCON CHANGED TO /dev/ttyc3d10 ****
    #
    INIT: New run level: S

    INIT: SINGLE USER MODE
    Is your console one of the following: a 2392A,
    2393A, 2397A or 700/92? [y/n]:
    ```

    a. If your console is listed, enter:

        ```
        y
        ```

        Go on to step 47.

    b. If your console is not listed, enter:

        ```
        n
        ```

        When requested, enter the correct TERM type. Go on to the next step.

47. After the system is put into single user mode, at the UNIX prompt, enter the following to kill all processes:

    ```
    /etc/killall
    ```

48. Enter:

    ```
    /etc/update
    ```

    Menus are displayed on the screen. For more information on the menus, refer to *Installing and Updating HP-UX HP 9000, Series 600/800 Computers* under Running the Update Program.

49. At the main menu, highlight the following choice:

    ```
    Change Source or Destination -->
    ```

    Press **F4** to select it.

50. Highlight the following choice:

    ```
    From Tape Device to Local System ...
    ```

    Press **F4** to select it.

51. The Tape Device File (source) prompt is displayed.

    a. If you are using UNIX version 8.0, enter:

        ```
        /ult/patch/hp/phkl_0375
        ```

        (Be sure to type a lower case L and not the number 1. Be sure to type the number zero and not the letter O.)

        To find the home directory, enter:

        ```
        grep ult:  /etc/passwd
        ```

    b. If you are using UNIX version 8.02 (NOVA series), enter:

        ```
        /ult/patch/hp/PHKL_0375.updt
        ```

        (Be sure to type upper case PHKL.)

        To find the home directory, enter:

        ```
        grep ult:  /etc/passwd
        ```

    c. The destination directory is the following:

        ```
        /
        ```

    d. Press **F4** to select it.

52. Highlight the following choice:

    ```
    Select/View Partitions and Filesets ...
    ```

    Press **F4** to select it.

53. A screen similar to the following is displayed:

    ```
          Source:/ult/patch/hp/p>    Destination: /

    Selected        Name        Partition Description      Size in Kbytes
        n          PHKL_0375    tape0 EOF patch                  54
        _
        _
        _
        _
    ```

    Verify the patch and select it by replacing the n with a y under the
    Selected column.

    Press **F4**.

54. The following prompt is displayed:

    ```
    Would you like more information?   (y or n)
    ```

    If you would like more information, enter:

    y

    Otherwise, enter:

    n

55. The following prompt is displayed:

    ```
    Start loading filesets now?
    ```

    Enter:

    y

56. The patch is applied, the system is shutdown automatically. The UNIX login prompt is displayed.

   Reboot your system from the other terminal you started the upgrade with by entering the following at the UNIX login prompt (in lowercase):

   `ultboot`

   Then follow the instruction on booting in the *Ultimate PLUS System Administrator Guide for HP Systems*.

57. Your Ultimate PLUS system is now ready to be used.

Notes

3   Upgrading Ultimate PLUS

Use this method to install new Ultimate PLUS files, Coldstart, and Abs sections from the SYS-GEN tape and then upgrade specific files. You can use this method only if you are **currently using revision 217DB or later.**

With this method you will:

* prepare your system for the upgrade

* restore Coldstart and Abs sections from the new SYS-GEN tape

* upgrade your applications

Summary of Procedures

A brief summary of installation procedures is given below. In the next section, detailed instructions and reproductions of the screen display at each step are presented.

Note: Before beginning the upgrade, please be sure to be on a terminal other than the console; the console cannot be used with Ultimate PLUS.

Note: During the upgrade, if for any reason you want to re-install Ultimate PLUS, you must de-install Ultimate PLUS first before re-installing it. For instructions on how to de-install, please see Appendix E.

1.   Make sure all users are off the system.

2.   Make sure you are running HP-UX 8.0 or later before beginning the upgrade procedure. Versions prior to HP-UX 8.0 are not supported on 217EA.

If you are currently using Ultimate PLUS, you must shutdown your system in a controlled manner; otherwise go on to the next step. Enter:

```
:WARMSTOP
```

3. If the UNIX prompt is displayed, enter:

```
exit
```

4. At the UNIX login prompt, login as root by entering the following:

```
root
```

Enter the appropriate password when prompted. The UNIX prompt is displayed.

5. Change directories by entering the following:

```
cd  /usr/tmp
```

6. Mount the Ultimate PLUS SYS-GEN tape that was supplied and put the tape drive online.

7. Load the UNIX files for Ultimate PLUS by entering the following:

```
cpio  -idumvcB  <  /dev/rmt/0m
```

/dev/rmt/0m is the standard path to the tape drive; if your system has a different path, please use it. (*Do not use Berkeley mode pathname.*)

Several UNIX files needed for the installation are loaded. When the files are loaded, the UNIX command prompt is redisplayed.

8. Install Ultimate PLUS by entering the following command:

```
./UPGRADE  /tape.path
```

Enter the same tape path name that you specified in step 7.

9. The following prompt is displayed:

```
Enter <y> to upgrade the account to the new release 217EA
<CR> = n?
```

Enter:

y

10. A screen similar to the following is displayed after you upgrade HP-UX from 7.0 to 8.0 and then upgrade Ultimate PLUS:

```
Due to the new naming convention used in HP-UX 8.0 release,
the disk section /dev/dsk/c100nd0sm is renamed to
/dev/dsk/cnddsm
Press <CR> to continue: ?
```

Press **RETURN**.

11. The Ultimate PLUS Initial Configuration screen is displayed. If you change the dedicated disk sections or file systems on which to install the Ultimate PLUS database, or if you change the total number of configured lines, you will need to do a file-restore. Ultimate recommends you do not change these.

To change a displayed configuration, enter the number preceding the device. The screen for each device configuration is described in chapter 2. After you have configured a device, you are returned to the initial configuration screen.

At the prompt, enter:

y

Checksums are verified and ownership and permissions of files are set. This takes a few minutes. The following message is displayed if you changed configuration file:

```
(nn) lines of the config file were processed
A cold start is required for changes to become effective.
Enter <y> to commit <q> to abort <CR> to go back?
```

Enter:

y

Then you will see the following message:

```
The configuration file has been modified, applying the
convert utility...
(nn) lines of the config file were processed.
```

12. The System Startup Options menu is displayed.

   To restart the system, type C (*do not press RETURN*). The following is displayed:

   ```
   0 /dev/rmt/0m
   1 /dev/rmt/1m
   2 ./sysgen
   Please select the tape device to use (<CR>=2):
   ```

   You can select either the tape device that has the SYS-GEN tape loaded or the device called ./**sysgen**, which is actually a disk directory with files; the SYS-GEN files needed for a coldstart were placed on that device. For more information, see the tape discussion in Chapter 3 of the *System Administrator Guide for HP Systems*.

13. Information about your system configuration is displayed. Then you are asked for your system serial number.

   a. If the system serial number is correct, press **RETURN**. (To verify the number, check the label on the back of the computer. The number is in the form HPxxx.)

   b. If it is not correct, enter the correct serial number. The serial number and the prompt is redisplayed. Press **RETURN**.

14. At the Abs restore options prompt, press **RETURN**.

15. The copyright message is displayed. Press **RETURN**.

16. The time is requested. To accept the displayed time, press **RETURN**; otherwise, enter the appropriate time in military format (HH:MM:SS).

17. To accept the displayed date, press **RETURN**; otherwise, enter the appropriate date. The system accepts all standard formats.

18. At the Logon prompt, enter the following:

    SYSPROG

19. The SYSPROG main menu is displayed. The Ultimate system is now installed. To go to TCL, press **RETURN**.

20. Make sure the SYS-GEN tape is loaded and online. Then at TCL enter:

    T-ATT or **T-ATT** *n*

    If you have more than one tape drive, replace *n* with the number of the drive you are using.

21. At TCL enter:

    T-REW

22. At TCL enter:

    T-SPACE 19

23. Load the new master dictionary from tape. At TCL enter:

    T-LOAD MD (O,I)

    (Be sure you type the letter O, not the number zero.)

24. To upgrade your accounts, at TCL enter:

    UPG-REV

25. System files are upgraded, then the names of all accounts to be upgraded are displayed. The following prompt is displayed:

    (C)ontinue or (Q)uit?

    Type C *(do not press RETURN)*.

26. To install the UltiWord, UltiLink, UltiMation, ATP (Acceptance Test Procedure), or UltiWriter accounts for the first time, follow this step to load one or more of the accounts onto your system from the SYS-GEN tape. If you do not want to install these accounts, go on to step 27.

    a. Make sure the SYS-GEN tape is loaded and online.

    b. At the SYSPROG main menu, to select Load Ulti's menu, enter:

        3

    c. Select the number of the account you want loaded on your system. To load all of the accounts, enter:

        6

    This takes some time.

    d. If you chose option 5 or 6 and already have an earlier version of UltiWriter installed, you receive the following message:

        ```
        UltiWriter account already exists.  To upgrade
        it, log to UW and RUN SYSLIB UW.UPDATE.
        ```

    If you receive this message, finish upgrading the Ultimate Operating System. Then refer to Appendix C for the steps to setup the new version of UltiWriter.

    e. After you have loaded the Ultis you want, the system returns you to the SYSPROG main menu. Press **RETURN** to go to TCL.

    For information on the Ultis you have just loaded, please refer to the *UltiWord Reference and Training Guide,* the *UltiLink User's Guide*, the *UltiMation User's Guide,* and the *UltiWriter User's Guide.* (The ATP account contains Acceptance Test Procedures, and should only be used when instructed by Ultimate TAC.)

27. If you had UltiMation on your system before, follow the instructions in the *UltiMation User's Guide* under Setting Up UltiMation On Another Account to re-enable UltiMation for the accounts that have it installed.

28. If you are upgrading from a revision prior to 200, you must re-enable UltiWord (WP) for the accounts that have it installed. To enable UltiWord, follow the instructions in the *UltiWord Reference Guide*.

29. If you are using UNIX version 8.0 or 8.02 (NOVA series), follow the instructions in chapter 2 beginning at step 41 on page 2-75 and returning after step 56 to apply a patch because of a tape drive problem with HP-UX.

   Go on to the next step after the patch is applied.

30. The upgrade is complete. You may now log on and begin your normal work, or enable UltiWriter for use on your other accounts. Keep the file-save from your previous revision for future reference.

Note: *The Ultimate applications do not support the HP terminal.*

Detailed Instructions

> *Note:* Before beginning the upgrade, please be sure to be on a terminal other than the console; the console cannot be used with Ultimate PLUS.

> *Note:* During the upgrade, if for any reason you want to re-install Ultimate PLUS, you must de-install Ultimate PLUS first before re-installing it. For instructions on how to de-install, please see Appendix E.

1. Make sure all users are off the system.

2. Make sure you are running HP-UX 8.0 or later before beginning the upgrade procedure. Versions prior to HP-UX 8.0 are not supported on 217EA.

    If you are currently using Ultimate PLUS, you must shutdown your system in a controlled manner; otherwise go on to the next step. Enter:

    ```
    :WARMSTOP
    ```

3. If the UNIX prompt (#) is displayed, enter:

    ```
    exit
    ```

4. At the UNIX login prompt, login as root by entering the following:

    ```
    root
    ```

    Enter the appropriate password when prompted. The UNIX prompt (#) is displayed.

5. Change directories by entering the following at the UNIX prompt:

    ```
    cd /usr/tmp
    ```

6. Mount the Ultimate PLUS SYS-GEN tape that was supplied and put the tape drive online.

7. Load the UNIX files for Ultimate PLUS by entering the following:

   ```
   cpio  -idumvcB  <  /dev/rmt/0m
   ```

   /dev/rmt/0m is the standard path to the tape drive; if your system has a different path, please use it. (*Do not use Berkeley mode pathname.*)

   Several UNIX files needed for the installation are loaded. When the files are loaded, the UNIX prompt is redisplayed.

8. Install Ultimate PLUS by entering the following command:

   ```
   ./UPGRADE  /tape.path
   ```

   Enter the same tape path name that you specified in step 7.

9. The following prompt is displayed:

   ```
   Enter <y> to upgrade the account to the release 217EA
   <CR> = n?
   ```

   Enter:

   y

10. A screen similar to the following is displayed after you upgrade HP-UX from 7.0 to 8.0 and then upgrade Ultimate PLUS:

    ```
    Due to the new naming convention used in HP-UX 8.0 release,
    the disk section /dev/dsk/xxxxxx is renamed to
    /dev/dsk/yyyyyy
    Press <CR> to continue: ?
    ```

    Press **RETURN**.

11. The following prompt is displayed:

    ```
    Enter <h> if installing from Half-inch, or <d> if
    installing from DDS?
    ```

    Enter the appropriate option.

    Then an initial configuration screen similar to the following is displayed:

    ```
              The Ultimate PLUS Initial Configuration for ult
          ------------------------------------------------
    1) Tapes:
             -/dev/rmt/0m          Half Inch       Unit 0
    2) Disks:    need at least nn Megabytes
             -/dev/dsk/c5d0s10   126 Megabytes    Unit 0
    3) Lines:
             - Fixed            66 1-66
             - Preferred         1 0
             - Additional       66
    4) Printers (Direct and UNIX spooler) available to Ultimate PLUS
             - /dev/tty10p5          Direct connection      Unit 0
    5) Printers available to UNIX Spooler
             - /dev/tty10p5          Disabled     quietjet    dumb
    6) Memory configuration, buffers 20000, suitable for 125 users.
    7) HP-UX Resource Configuration
    8) Verify Ultimate PLUS account
    9) Bisync Devices:
            --NONE CONFIGURED--


    Enter selection to update, <q> to abort <y> to commit, <CR> to
    continue:
    ```

    If you change the dedicated disk sections or file systems on which to install the Ultimate PLUS database, or if you change the total number of configured lines, you will need to do a file-restore. Ultimate recommends you do not change these.

    Note: *In the initial configuration menu, option 9, Bisync Devices, will be displayed if the UNIX directory, /usr/ult_bisync, is present; otherwise, option 9 will not be displayed or available.*

    To change a displayed configuration, enter the number preceding the device. The screen for each device configuration is described in chapter 2. After you have configured a device, you are returned to this screen.

At the prompt, enter:

y

Checksums are verified and ownership and permissions of files are set. The following message is displayed if you changed configuration file:

```
(nn) lines of the config file were processed
A cold start is required for changes to become effective.
Enter <y> to commit <q> to abort <CR> to go back?
```

Enter:

y

Then you will see the following message:

```
The configuration file has been modified, applying the
convert utility...
(nn) lines of the config file were processed.
```

Starting the Upgrade

Now you will restore the new programs and files from the SYS-GEN tape.

12. The System Startup Options menu is displayed:

```
This is the Ultimate PLUS System


 System Startup Options
 (C)oldstart
 (F)ile Restore
 (Q)uit Ultimate PLUS


 Enter Option
```

To restart the system, type C (*do not press RETURN*). A screen similar to the following is displayed:

```
0  /dev/rmt/0m
1  /dev/rmt/1m
2  ./sysgen
Please select the tape device to use (<CR>=2):
```

You can select either the tape device that has the SYS-GEN tape loaded or the device called **./sysgen**, which is actually a disk directory with files; the SYS-GEN files needed for a coldstart were placed on that device. For more information, see the tape discussion in Chapter 3 of the *System Administrator Guide for HP Systems.*

13. A screen similar to the following is displayed. Then you are asked for your system serial number.

```
Loading abs data

001  002  ...  010

Flusher started successfully (pid = xxx)
Ultimate PLUS port 0 is assigned to /dev/ttyc3d10

Tape n attached
Block size: nnnn


Hardware serial number is yyyyyyyy


System serial # is xxxx

Enter system serial # or press <CR> to accept
```

a. If the system serial number is correct, press **RETURN**. (To verify the number, check the label on the back of the computer. The number is in the form HPxxx.)

b. If it is not correct, enter the correct system serial number. The serial number and the prompt is redisplayed. Press **RETURN**.

14. A similar Abs restore option screen is displayed.

```
Abs restore option:


    n - Skip tape forward 'n' files


Type option and press <CR>, or just press <CR> to
continue:
```

Press **RETURN** to perform the Abs restore.

15. A screen similar to the following is displayed.

```
A127
Saving Monitor
Ultimate PLUS port 0 starting up port n...

Spooler started


date time Logon please:
<<< Copyright 1989, The Ultimate Corp., as an unpublished      >>>
<<< work. All Rights Reserved. This work is the property of    >>>
<<< and embodies trade secrets and confidential information    >>>
<<< proprietary to the Ultimate Corp.and may not be reproduced >>>
<<< copied, used, disclosed, transferred, adapted, or modified >>>
<<< without the express written approval of the Ultimate Corp. >>>
<<<                                                            >>>
<<<        Welcome to the Ultimate PLUS Operating Environment  >>>
<<<   time             Release 10 Rev 217            date       >>>


This is the Cold-Start Procedure
    Enter <CR> to continue
```

Press **RETURN**.

16. Secondary workspaces are linked. Then the time is requested.

```
Linking secondary TCL workspaces

[294] n additional task workspaces initialized

time    date

Time =
```

To accept the displayed time, press **RETURN**; otherwise, enter the appropriate time in military format (HH:MM:SS). For example, enter 5 pm as 17:00:00.

17. The date is requested.

```
17:00:00

time    date

Date =
```

To accept the displayed date, press **RETURN**; otherwise, enter the appropriate date. The system accepts all standard date formats.

18. A screen similar to the following is displayed:

```
<<<--Load terminal definitions-->>>
SP-STARTLPTR 0,0,1,PO
[1118]
     The printer control block has been initialized.
     The correct paper and LPI settings must have been
     previously set to insure proper printing.



<Connect time = x mins.;CPU=n units;lptr pages=0>
<Logged off at time on date      >

date  time  Logon please:
```

User modes are loaded, the printer is started, and the object code is verified. The coldstart is completed.

At the Logon prompt, enter:

SYSPROG

19. The copyright message redisplays briefly. Then the SYSPROG main menu is displayed. To go to TCL, press **RETURN**.

Upgrading Your Applications

In the next several steps you will upgrade your applications files, such as UltiWord, UltiLink, UltiMation, UltiNet, and UltiWriter. Complete the following steps.

Caution: *Do not use any application programs until you complete the remaining steps.*

20. Make sure the SYS-GEN tape is loaded and online. Then at TCL enter:

T-ATT or **T-ATT** *n*

If you have more than one tape drive, replace *n* with the number of the drive you are using.

21. At TCL enter:

T-REW

22. At TCL enter:

    T-SPACE   19

    This command skips 19 files on tape. The names of the files are
    displayed on the screen, and the message End of file appears
    repeatedly. The last name displayed should be STAT-FILE.

Caution: *If the last file listed is not STAT-FILE, enter T-REW to*
rewind the tape to the beginning of the reel. Then try this
step again. If the last file listed is still not STAT-FILE, do not
proceed. Call Ultimate TAC.

23. Load the new master dictionary from tape. At TCL enter:

    T-LOAD   MD   (O, I)

    (Be sure you type the letter O, not the number zero.)

    The following message is displayed, then you are returned to the
    TCL prompt:

    n items loaded

24. Your next step is to upgrade the files in your accounts.

    a. Make sure the SYS-GEN tape is loaded and online. Make sure
        you are logged on to the SYSPROG account and are at TCL.

    b. Enter:

        UPG-REV

        The following message is displayed:

        You are upgrading to Rev 217*xx*.

        System accounts and files are upgraded. While this is taking
        place, several system-related messages, including repetitions of
        End of file are displayed. This takes several minutes.

25. The names of all accounts to be upgraded are displayed. A screen
    similar to the following is displayed.

```
*** USER MASTER DICTIONARY UPGRADE PROCEDURE ***


The following accounts are to be upgraded:
ULTIMATION
WP
TRAINING
ULTILINK
GAMES
.
.
.

(C)ontinue or (Q)uit?
```

Type C *(do not press RETURN)*. The master dictionary of each
account displayed is upgraded. When this step is complete, you
receive the following messages:

```
*** UPDATE COMPLETE ***
UPGRADE COMPLETED AT time date.
```

Note: *If you get an error message such as Update rejected - D/CC/CL
pointer, it may be because the account listed directly above the
message contains a file that has the same name as an Ultimate
command. If you are not sure of the cause of the message,
call Ultimate TAC.*

26. To install the UltiWord, UltiLink, UltiMation, ATP (Acceptance
    Test Procedure), or UltiWriter accounts for the first time, follow
    this step to load one or more of the accounts onto your system from
    the SYS-GEN tape.

Note: *If you do not want to install these accounts, or if they are
already installed, go on to step 27.*

a. Make sure the SYS-GEN tape is loaded and online.

b. At the SYSPROG main menu, to select Load Ulti's menu, enter:

    3

The following screen is displayed.

```
LOAD ULTI's MENU

Load from SYSGEN tape

1.  UltiWord

2.  UltiLink

3.  UltiMation

4.  ATP

5.  UltiWriter

6.  Restore All Ultis

Press RETURN for main menu

      ENTER SELECTION - ?
```

c. Select the number of the account you want loaded on your system. To load all of the accounts, enter:

    6

This takes some time.

d. If you chose option 5 or 6 and already have an earlier version of UltiWriter installed, you receive the following message:

    ```
    UltiWriter account already exists.  To upgrade
    it, log to UW and RUN SYSLIB UW.UPDATE.
    ```

If you receive this message, finish upgrading the Ultimate Operating System. Then refer to Appendix C for the steps to setup the new version of UltiWriter.

e. After you have loaded the Ultis you want, the system returns you to the SYSPROG main menu. Press **RETURN** to go to TCL.

For information on the Ultis you have just loaded, please refer to the *UltiWord Reference and Training Guide,* the *UltiLink User's Guide,* the *UltiMation User's Guide,* and the *UltiWriter User's Guide.* (The ATP account contains Acceptance Test Procedures, and should only be used when instructed by Ultimate TAC.)

27. If you had UltiMation on your system before, follow the instructions in the *UltiMation User's Guide* under Setting Up UltiMation On Another Account to re-enable UltiMation for the accounts that have it installed.

28. If you are upgrading from a revision prior to 200, you must re-enable UltiWord (WP) for the accounts that have it installed. To enable UltiWord, follow the instructions in the *UltiWord Reference Guide.*

Applying the Patch

29. If you are using UNIX version 8.0 or 8.02 (NOVA series), follow the instructions in chapter 2 beginning at step 41 on page 2-75 and returning after step 56 to apply a patch because of a tape drive problem with HP-UX.

Go on to the next step after the patch is applied.

30. Your upgrade is complete.

To install or upgrade UltiWriter, follow the instructions listed in Appendix C.

Keep the file-save from your previous revision for future reference.

Notes

A SYS-GEN Accounts

The general format of the SYS-GEN tape is as follows:

SYSTEM BOOT 1
SYSTEM BOOT 2
COLD LOAD
ABS LOAD
FILE DATA (including the following accounts)
       SECURITY
       BLOCK-CONVERT
       SYSTEM-ERRORS
       PROCLIB
       SYSLIB
       SYSTEM
       TRAINING
       SYSPROG
       ERRMSG
       SPSYM
       GAMES
       ACC
STAT-FILE

The following files are T-Dumped or Account-Saved at the end of the SYS-GEN tape. These files can be selectively restored, and are used to update user accounts, as well as, ATP, UltiLink, UltiMation, UltiWord, UltiWriter, and UltiNet, if installed.

To position the tape at the first file, execute the following command from the beginning of the tape:

```
T-SPACE   19
```

The files are dumped or saved in the following order.

SYSPROG MD
DICT SYSLIB
NEWAC
DICT SYSPROG-PL
ERRMSG

SYSLIB
DICT TERMDEF
TERMDEF
OSYM
PSYM
DICT STAT-FILE
DICT VSAVE-STATS
DICT BLOCK-CONVERT
USER-MODES
USER-MODES,SOURCE
DICT ACC
DICT SYS-ERRORS
DICT DOCUMENT
DOCUMENT
DICT REALLOC-FILE
DICT SPSYM
SPSYM
SPSYM,DF
SYSTEM,WP
DICT WP-PROGS
WP-PROGS,TABLES
DICT OA.PROG
OA.PROC
SYSTEM,ULTIMATION
DICT KF.MSG.EN
KF.MSG.EN
DICT KF.JOB
DICT ECOS
account-save of WP
account-save of ULTILINK
account-save of ATP
account-save of ULTIMATION
ULTINET MD
ULTINET BP
account-save of UW.SDX
account-save of UW

B   Verifying File Saves

One of the early steps in the upgrade method is to do a complete file-save and to verify the accuracy of the tape when finished. The procedures for doing this vary slightly according to the revision of the operating system you are upgrading from.

If you are upgrading from Revision 190V or later, use the VERIFY-SAVE procedure. If you are upgrading from a revision prior to 190V and have a GCR tape drive, use the T-CHK procedure. If you are upgrading from a revision prior to 190V and have a non-GCR tape drive, use the SELECTIVE RESTORE procedure.

The following are descriptions of each of the three procedures.

Verify-Save Method

1. Log on to the SYSPROG account, and press **RETURN** to go to TCL. Then enter:

   T-ATT or **T-ATT** *n*

   If you have more than one tape drive, replace *n* with the number of the tape drive you are using.

2. Enter the following to redisplay the SYSPROG main menu:

   SYSPROG

3. Mount the first reel of your file-save on the tape drive you designated and make sure it is online.

4. At the SYSPROG main menu, to select File-Save Menu, enter:

   1

Confidential and Proprietary to The Ultimate Corp.

Then select File-Save Verification. The following message is displayed:

```
Save Verification beginning at time date
            Block size: nnn
```

5. The files on the tape are listed on the screen. When the tape has been verified, the following message is displayed:

```
Save Verification completed at time date
```

Then the following message is displayed:

```
LIST-VSAVE-STATS LPTR
```

The statistics report about this tape is printed.

6. If the report indicates that your tape contains errors, then use another tape to do a file-save. Then try this test again. If your tapes still have errors, call the Ultimate TAC.

    If the report does not indicate errors on the tape, the tape may be used during the upgrade. Repeat this step for each tape in your file-save set. Once all tapes have been verified, continue with your upgrade.

Note: *You can also enter the VERIFY-SAVE and LIST-VSAVE-STATS commands at TCL in the SYSPROG account. If you enter the VERIFY-SAVE command at TCL, you can include options to verify tapes that contain multiple account-saves, or to invoke the Ultimate debugger. Refer to the Ultimate System Commands Guide for more information.*

Selective Restore Method

1. Mount the first reel of your file-save tape and make sure it is loaded and online.

2. At TCL in the SYSPROG account, enter:

    T-ATT or **T-ATT** *n*

    If you have more than one tape drive, replace *n* with the number of the tape drive on which the tape is mounted.

3. At TCL, type the following command. Be sure to enter a space before the asterisk (*). Enter:

    SEL-RESTORE   SYSPROG-PL   *

    The following prompt appears:

    ```
    Account name on tape?
    ```

    Enter a name of an account that you know **does not exist** on the tape. Next, you will see this prompt:

    ```
    Filename on tape?
    ```

    Again, enter a name that does not exist.

4. The system begins reading the tape for the account and filenames you entered. If the tape is one reel of a multiple-reel set, then you are prompted to enter reel 2, then reel 3, and so on, until all reels have been mounted. Of course, the system will not find the account and filenames you just entered, so when all reels have been mounted, the following message is displayed:

    ```
    0 item(s) have been restored
    ```

5. If you see an error message such as the following, type **Q** to quit.

    ```
    Parity Error (A)ccept (R)etry (Q)uit
    ```

    Your tape contains critical parity errors and should not be used. Use another set of tapes to do the file-save. Then test the tape again. Once the tape verifies, continue with your upgrade.

C Installing or Upgrading UltiWriter

If you are installing UltiWriter for the first time, follow the procedures in Section 1. If you already have UltiWriter on your system, use Section 2.

Note: *The Ultimate applications do not support the HP terminal.*

UltiWriter can be used with the following terminals:

ADDS 2020	WYSE 30
ADDSVP	WYSE 50
ESPRIT OPUS 4	WYSE 60
IBM PC	WYSE 85 - VT200 8-BIT

Installing UltiWriter 10

Use the procedures in this section if you have never had UltiWriter on your system.

1. After you have finished your installation or upgrade of the Ultimate Operating System, log to UltiWriter.

    If you are at the Ultimate logon prompt, enter:

    ```
    U W
    ```

    Otherwise, at TCL, enter:

    ```
    LOGTO  UW
    ```

    A screen similar to the following is displayed.

```
U L T I W R I T E R   I N S T A L L A T I O N   P R O G R A M


*************************************************************
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*                     KEOSOFT INTERNATIONAL CORPORATION,*
*                     ALL RIGHTS RESERVED                *
*************************************************************


THIS PROGRAM IS USED TO:


1)Install the ULTIWRITER Word Processor in this account.
2)Create ULTIWRITER system file Q-POINTERS in another account.


ENTER OPTION (or 'S' to stop):
```

2. Check, and if necessary, change your terminal type.

   a. At the prompt, to stop the installation process, enter:

      S

      Control returns to TCL.

   b. To display the terminal type, enter:

      TERM

   c. If necessary, change the terminal type so that it reflects the current terminal type.

3. To return to the opening menu, enter:

   KP.INSTALL

4. To install UltiWriter, enter:

   1

5. The installation program now creates the UltiWriter system files, master dictionary items, and terminal and printer tables.

6. When the installation is complete, the UltiWriter logon screen is displayed. The defaults for the logon and password are both 999.

   To logon and use UltiWriter, enter:

   9 9 9

   To logoff, press **<F4>**.

   For information on logon, password, and other aspects of UltiWriter set-up procedures, see the *UltiWriter System Administrator's Guide.* For information on using UltiWriter, refer to the *UltiWriter Training Guide* and the *UltiWriter User's Guide.* There is also a description of UltiWriter in the *Revision 210 Guide to New Features.*

Upgrading to UltiWriter 10

Use the procedures in this section if you already have UltiWriter installed on your system.

1. After you have finished upgrading the Ultimate Operating System, make sure the SYS-GEN tape is mounted and online. Log to UltiWriter.

    If you are at the Ultimate logon prompt, enter:

        U W

    Otherwise, at TCL, enter:

        LOGTO UW

    A screen similar to the following is displayed.

```
ULTIWRITER  INSTALLATION  PROGRAM


******************************************************************
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*                       KEOSOFT INTERNATIONAL CORPORATION,*
*                       ALL RIGHTS RESERVED                  *
******************************************************************


THIS PROGRAM IS USED TO:


1) Install the ULTIWRITER Word Processor in this account.
2) Create ULTIWRITER system file Q-POINTERS in another account.


ENTER OPTION (or 'S' to stop):
```

Check, and if necessary, change your terminal type.

a. To exit the Installation Program, enter:

    S

Control returns to TCL.

b. To display the terminal type, enter:

TERM

c. If necessary, change the terminal type so that it reflects the current terminal type.

3. To start the UltiWriter Update Program, at TCL enter:

RUN SYSLIB UW.UPDATE

4. The Update menu similar to the following is displayed.

```
U L T I W R I T E R   U P D A T E   P R O G R A M,   V2


****************************************************************
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*                      KEOSOFT INTERNATIONAL CORPORATION,*
*                      ALL RIGHTS RESERVED               *
****************************************************************


THIS PROGRAM IS USED TO:


1) Update the ULTIWRITER Word Processor to a new version
   (Example: Update from 9.0 to 9.2)


2) Update the ULTIWRITER Word Processor to a new release
   (Example: Update from 9.2 to 10.0)


ENTER OPTION (or 'S' to stop):
```

Enter:

2

The following message is displayed:

Load the update tape and press RETURN.   (Press 'S' to stop.)

The update tape is on your SYS-GEN tape. Make sure it is loaded, and then press **RETURN**.

5. The update program now updates the BASIC program file and the UltiWriter system files.

6. When the upgrade is complete, the Installation Program menu is redisplayed. Enter

    1

7. After a few seconds the UltiWriter Shell Logon prompt is displayed:

    ```
    Please enter your ID:

    Name:

    Password:
    ```

    The defaults for the logon and password are both 999. If you use the default logon, or enter a valid personal logon, the name field is automatically filled in.

    To logon and use UltiWriter, enter

    999

    To logoff, press **<F4>**.

8. UltiWriter 10 includes a new Soundex dictionary, UW.SDX. The dictionary from UltiWriter 9.2, UW.DICT, should be merged with UW.SDX, so that words you have added will be included. The merging of the dictionaries can take several hours.

    a. To merge UW.DICT, logon to UW.

    b. At the UltiWriter System Menu Enter Selection prompt, select option **6**, System Administration.

    c. At the System Administration Menu Enter Selection prompt, select option **7**, Dictionary Maintenance.

d. Use the available function keys to edit UltiWriter's dictionary. For more information, see the *UltiWriter System Administrator's Guide*.

9. For information on logon, password, and other aspects of UltiWriter set-up procedures, see the *UltiWriter System Administrator's Guide*. For information on using UltiWriter, refer to the *UltiWriter Training Guide* and the *UltiWriter User's Guide*. There is also a description of UltiWriter in the *Revision 210 Guide to New Features*.

Notes

D Converting Words Dictionary

If you restored accounts from a revision prior to 200D and if you use the WORDS dictionary, you must convert it. Follow the steps below to convert your WORDS dictionary to the new format.

1. Create a Q-pointer to WORDS.

    a. Log on to the SYSPROG account, and press **RETURN** to go to TCL. Then enter:

        ED MD WORDS

    b. To go to insert mode, enter:

        I

    c. Then enter:

        Q

    d. Enter:

        WORDS

    e. Press **RETURN** again, and to file the Q-pointer, enter:

        F I

    A screen similar to the following is displayed:

```
:ED MD WORDS
New item
Top
.I
001+Q
002+WORDS
003+
Top
.FI
'WORDS' filed.
```

2. Save your WORDS dictionary on tape.

   a. Mount a blank tape and make sure it is online. At TCL enter:

      T-ATT or **T-ATT** *n*

      If you have more than one tape drive, replace *n* with the number of the tape drive you are using.

   b. Enter:

      T-DUMP   WORDS

   c. The following message is displayed:

      n items dumped

      Enter the following to rewind the tape:

      T-REW

   d. Do not unload the tape because you will use it again.

3. Now you must delete the existing WORDS account and the WORDS Q-pointer you created.

   a. At TCL enter:

      DELETE-ACCOUNT   WORDS

   b. The following prompt is displayed:

      List files to be deleted?

      Enter:

      N

      The following prompt is displayed:

      Do you still want to delete the account?

      Enter:

      Y

4. Create a new WORDS account in the new format.

   a. At TCL enter:

      CREATE-ACCOUNT   WORDS

   b. The following prompt is displayed:

      ```
      Defining (A)ccount or (S)ynonym:
      ```

   Enter:

      A

   The following screen is displayed:

   ```
       ULTIMATE Account Processor

       Account Name: WORDS (New)

   Dimensions:
       1. Modulo, Separation: 29,1

   Security:
       2. Password:
       3. System Privileges (0,1,2): 0
       4. Lines to Allow Logon:
       5. Retrieval Locks (Y/N): N
       6. Update Locks (Y/N): N

   Special Options:
       7. Accounting Option (Y.N): N
       8. Restart Option (Y/N): N
       9. Inhibit Break Key at Logon (Y/N): N
       10. File-Save Options (V,W,X):
   ```

   c. Press **RETURN** at the first two prompts.

   d. At the System Privileges prompt, enter:

      2

   e. Press **RETURN** at the rest of the prompts.

   f. When the cursor is at the Enter Option prompt, enter:

      F I

The cursor returns to the Account Name prompt. Press **RETURN** to go to TCL.

Note: *For more information on the CREATE-ACCOUNT command, see the Ultimate System Commands Guide.*

5. At TCL, enter:

   `LOGTO WORDS`

6. Enter:

   `ED MD WORDS`

   At the period (.) prompt, enter:

   `F D`

   You see the following message displayed:

   `'WORDS' deleted.`

7. At TCL, enter

   `CREATE-FILE WORDS 1,1 757,1`

   This creates the dictionary and data segments for the WORDS file.

8. In this step you must load your WORDS dictionary back onto the system. Make sure the tape you used in step 2 is loaded, online, and at the beginning of the tape. Enter:

   `T-LOAD WORDS`

   When the file is loaded, unload and remove the tape.

9. Log to SYSPROG and create a new Q-pointer to the WORDS account. Follow the same procedure you used in step 1.

10. At TCL, enter:

    `CLEAR-FILE DICT WORDS`

11. Update the WORDS account.

    a. At TCL enter:

       `UPDATE-ACCOUNT WORDS`

The following screen is displayed:

```
   ULTIMATE Account Processor

   Account Name: WORDS (Existing)
   Modulo, Separation: 29,1

Dimensions
   1. Reallocation (Modulo, Separation):

Security
   2. Password(s):
   3. System Privileges (0,1,2): 2
   4. Lines to Allow Logon:
   5. Retrieval Locks (Y/N): N
   6. Update Locks (Y/N): N

Special Options
   7. Accounting Option (Y.N): N
   8. Restart Option (Y/N): N
   9. Inhibit Break Key at Logon (Y/N): N
  10. File-Save Options (V,W,X):

        Enter Option (#, EX, FI):
```

b. At the Enter Option prompt, enter:

    1

This moves the cursor to the Reallocation option. Enter:

    1,1

c. If you want to include a password, to go to the Password(s) option, enter:

    2

Enter the password of your choice.

d. Go to the System Privileges option. Enter:

    0

e. Enter:

    FI

The cursor returns to the Account Name prompt. Press
RETURN to go to TCL.

Note: *For more information on the UPDATE-ACCOUNT command,*
see the Ultimate System Commands Guide.

12. Your UltiWord WORDS dictionary is now converted for use with
Revision 217EA.

E De-Installing Ultimate PLUS

Follow the steps below to de-install Ultimate PLUS.

1. Make sure you are logged onto the SYSPROG account. At TCL, enter:

    :WARMSTOP

    A screen similar to the following is displayed.

```
Phantom line 011 stopped.
Phantom line 012 stopped.
Flushing buffers...

Flushing done...
Flusher process stopped.
Shared memory segment relinquished.

Welcome to HP/832
Console Login:
```

2. If you are not logged in to UNIX as root, exit UNIX, then login as root. Change to a temporary directory by entering the following:

    cd /usr/tmp

3. De-install Ultimate PLUS by entering the following:

    /usrn/ult/bin/UNINSTALL

    or /ult/bin/UNINSTALL

    Replace *usrn* with the path where Ultimate PLUS was installed.

    To find *usrn*, enter the following:

    grep ult: /etc/passwd

4. The following prompt is displayed:

    Enter <y> to uninstall <ult> <CR> = n?

To continue, enter:

y

5. Messages are displayed as the Ultimate PLUS directories and files are removed. When all have been removed, the UNIX prompt is displayed. Continue with the upgrade.

Ultimate

THE ULTIMATE CORP.

ID
Number_____

Problem Identification Form

Name	Phone Number ( )	System Number	Date

At TCL, execute REV verb and enter the following information:	Hardware Platform: (manufacturer, model no.)
Firmware rev. _____ Kernel rev. _____ Async rev. _____ Abs rev. _____	
	Host O/S and revision
Diags rev. _____ ECOs _____ _____	Dealer Name

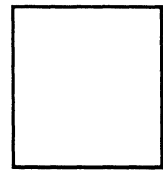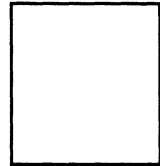| At TCL, execute WHAT (LSWP) verb and attach listing to this report. |
|---|
| Description of what happened and steps necessary to recreate (attach listings, tapes, if available): |

FROM:

Name: _____ System Number: _____

Company _____

Address: _____

City: _____ State: _____ Zip: _____

Fold and tape. Please do not staple.

The Ultimate Corp.
717 Ridgedale Avenue
East Hanover, NJ 07936
Attn: Technical Support

Fold and tape. Please do not staple.

Ultimate

ID
Number_____

Reader Comment Form

Ultimate welcomes your comments. If you find a problem or error in this manual, or can suggest an improvement, please complete this form. Please attach additional sheets, if necessary.

Name	Phone Number ( )	System Number
Name of Manual	Document Number	Date

Comments:

15059-2.2

FROM:

Name: _____   System Number: _____

Company _____

Address: _____

City: _____   State: _____   Zip: _____

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East Hanover, NJ   07936
Attn: Technical Support

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ID
Number_____

Suggestion Form

Ultimate welcomes your suggestions. If you have a suggestion or would like to recommend an enhancement, please complete this form. Please attach additional sheets, if necessary.

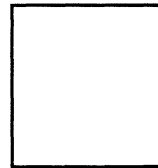| Name	Phone Number ( )	System Number	Date
Suggestion:			

FROM:

Name: _____   System Number: _____

Company _____

Address: _____

City: _____   State: _____   Zip: _____
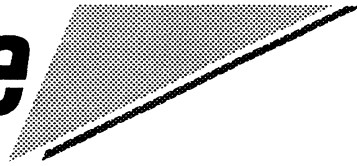

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Ultimate

THE ULTIMATE CORP.

717 Ridgedale Avenue
East Hanover, NJ 07936
201/ 887-9222
FAX 201/ 887-9546