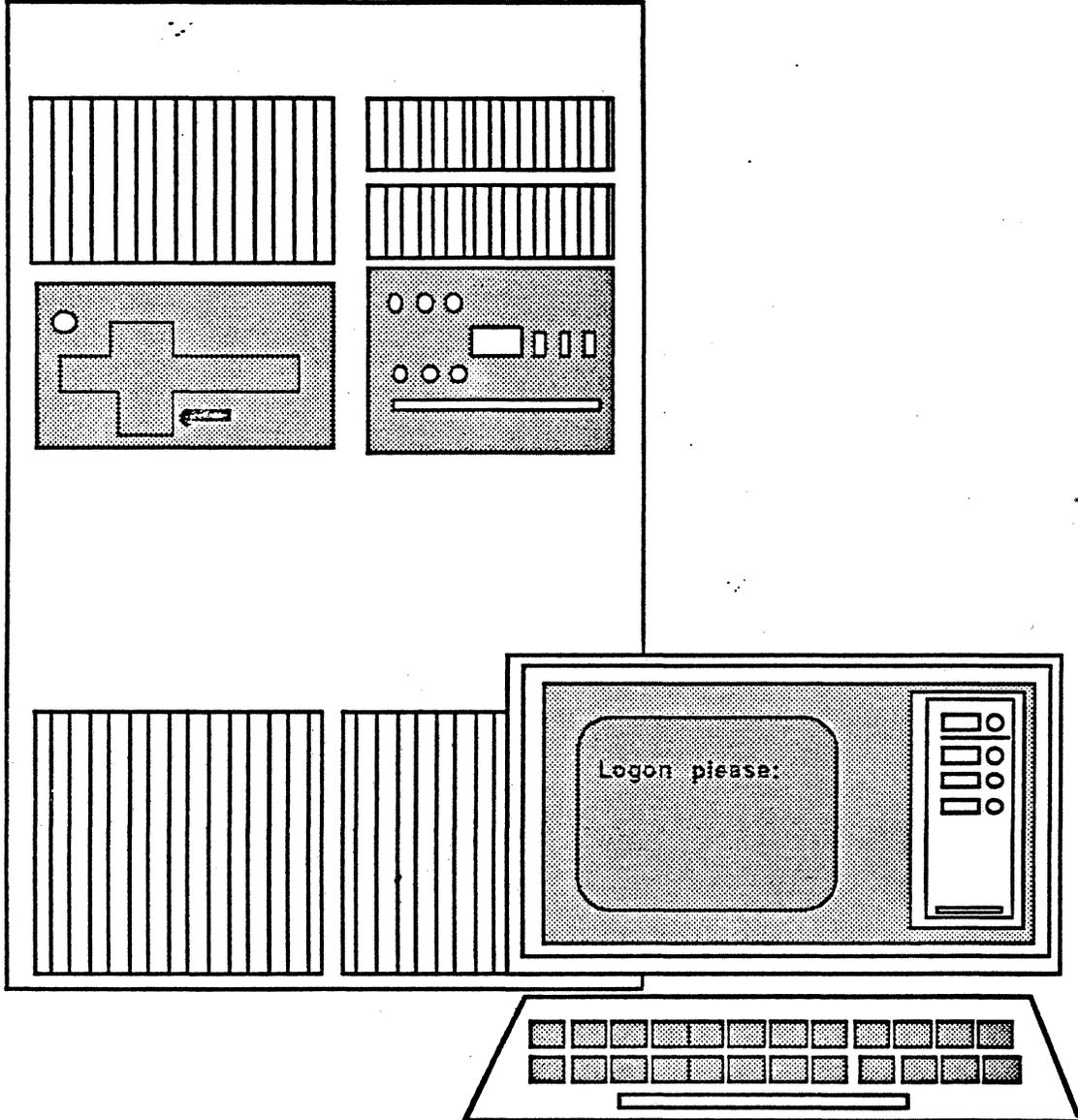


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ULT

1400 Series Upgrade Procedures



THE ULTIMATE CORP.

1400 Series
Upgrade Procedures

PROPRIETARY INFORMATION

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How To Use This Manual

HOW TO USE THIS MANUAL

The procedures in this document explain how to upgrade from your current Ultimate software to the latest software release. This document also includes instructions for those who are bringing up a new system.

These procedures involve your SYS-GEN tape or disk pack. The SYS-GEN is used to generate or reboot your Ultimate system.

Although the SYS-GEN tape can be used to generate or boot all Ultimate systems, this document is intended for Honeywell 1400 Series systems only. If you have any problems, contact the Ultimate Support Group.

The following topics are discussed in this manual:

- Section 1 describes **BRINGING UP A VIRGIN SYSTEM**. This section should be followed if your Ultimate system is new, and does not contain any software.
- Section 2 describes three methods of **UPGRADING AN EXISTING SYSTEM**. Read the introduction to this section to determine which method you should use. Then follow the appropriate procedure.
- Section 3 explains the procedure for **FORMATTING A DISK DRIVE**.
- Appendix A contains instructions for **BOOTING THE SYSTEM**. Refer to these instructions whenever you are asked to "boot or initialize the system."
- Appendix B contains a **LIST OF ACCOUNTS ON THE SYS-GEN**. This list may help you locate a particular account.

Bringing Up a Virgin System

1 BRINGING UP A VIRGIN SYSTEM

If you are bringing up a new system, follow the instructions below to load the ULTIMATE system software onto your system. These instructions can only be performed from the line zero terminal (console).

1. Begin by formatting your disk drive(s). First, you must Power On to the system.
 - A. Locate the main POWER switch on the back and turn to the ON position. If you have a dual-cabinet system, be sure to turn on both POWER switches.
 - B. Make sure the AC PRESENT light is lit.
 - C. If your system includes a 1/2" reel tape drive, turn the POWER switch on.
2. Boot the system. If you are rebooting a system that is up and running, you must first do a :WARMSTOP from the SYSPROG account.
 - A. Load the Ultimate SYS-GEN tape. (Refer to the tape-loading instructions in Section 4 of the Operations and Maintenance manual.)
 - B. If both the AC PRESENT and DC ON lights are on, press the RESET button. If only the AC PRESENT light is on, press the POWER ON button. The following screen will be displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iaagnostic Monitor
(F)ile Restore
(W)armstart

Enter option:

C. Refer to Section 6 of the Operations and Maintenance

Bringing Up a Virgin System

manual for information on each of the System Startup Options.

NOTE: If the system was :WARMSTOPPED prior to being powered off, refer to Section 6.7 of the Operations and Maintenance manual to WARMSTART the system. If the system was not :WARMSTOPPED prior to being powered off, then refer to Section 6.2 to COLDSTART the system.

3. If your disk(s) are new or have disk errors, format your disk(s). Otherwise, proceed to the next step. Section 3.1 of this manual explains formatting procedures.
4. If you formatted your disk(s), boot the system. The previous screen will be displayed.

If you did not format your disk, the previous screen should already be displayed.

At the prompt to select an option, enter F.

This initiates a complete File-Restore. You will be doing a complete file-restore with the SYS-GEN tape only!

Information about your disc configuration will be displayed. A sample screen is shown below.

Disc Configuration

| chan | set name | # | of |
|----------------------------------|---------------|---------|--------|
| FF20 | Ultimate 1400 | 1 | 1 |
| L 2000# | time date | ABS ULT | REL XX |
| Tape 0 attached Block size: 8192 | | | |

In the next screen, you will be asked for your system serial number.

Bringing Up a Virgin System

```
Tape 0 attached Block size: 8192  
System serial # is presently  
Enter system serial # or <CR> to accept
```

Enter your System Serial Number

(i.e., the "TN," "NE," "NB," or "BV" number of the system). For example, enter BV1234. If the correct serial number is shown, press RETURN to accept it.

The following screen is displayed.

```
Tape 0 attached Block size: 8192  
System serial # is presently BVxxxx  
Enter system serial # or <CR> to accept
```

Press RETURN if the number is correct.

You may re-enter the correct number if you made a mistake. Press RETURN after you enter the correct number.

The following screen is displayed.

Bringing Up a Virgin System

Tape 0 attached Block size: 8192

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

Press RETURN.

Do not enter a number. (Your SYS-GEN tape should already be mounted.) The following screen is displayed.

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN

WARNING: Do not mount your File-Save tape. Your SYS-GEN tape should already be mounted.

Press RETURN.

The following screen is displayed.

Bringing Up a Virgin System

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN

L 2000# time date DATA SYS-GEN
Seq# of this data tape: 0 0 0 0
Is this the right tape (Y/N)?

Enter Y and press RETURN.

The File-Restore will begin. Each filename on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

Update/transaction tapes (Y/N)?

Enter N and press RETURN.

The following screen is displayed.

Bringing Up a Virgin System

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0

date      time      Logon Please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright   date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XXX   date      >>>

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

Press RETURN.

The following screen is displayed.

```
date      time      Logon Please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright   date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XXX   date      >>>

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time      date

Time =
```

Bringing Up a Virgin System

Enter the time in military format (HH:MM:SS).

For example, enter 5PM as 17:00:00. The following screen is displayed.

```
-----  
This is the Cold-Start Procedure  
Enter <CR> to continue  
  
Linking secondary TCL workspaces  
  
X additional task workspaces initialized  
  
time      date  
  
Time = 17:00:00  
17:00:00  date  
Date =
```

Enter the date in the following format: MM/DD/YY.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

Bringing Up a Virgin System

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time      date

Time = 17:00:00
17:00:00  date
Date = 02/03/86
17:00:00  03 FEB 1986
```

The system will display several messages. If there are any error messages (i.e.: System does not verify), call the Ultimate Support Group immediately.

The following screen will be displayed.

```
date      time      Logon please:
```

5. Load the WP (UltiWord), UTILINK, ATP, and ULTIMATION accounts.
 - A. Logon to your SYSPROG account.
 - B. Mount your SYS-GEN tape. Make sure it is at load point and on-line.
 - C. From the SYSPROG main menu, select "Load WP account from SYS-GEN tape." The program will search for and load the WP account from the SYS-GEN tape.
 - D. When the WP account has been loaded, type SYSPROG and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load UTILINK account from SYS-GEN

Bringing Up a Virgin System

tape." The program will search for and load the UTILINK account from the SYS-GEN tape.

- E. When the UTILINK account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ATP account from SYS-GEN tape." The program will search for and load the ATP account from the SYS-GEN tape.
- F. When the ATP account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ULTIMATION account from SYS-GEN tape." The program will search for and load the ULTIMATION account from the SYS-GEN tape.

6. Create a duplicate SYS-GEN.

Ultimate recommends that you create one or more copies of the SYS-GEN for backup, in case your original SYS-GEN is missing or contains errors.

- A. Remove the SYS-GEN, and mount a write-enabled blank tape (or spare formatted disk pack) to be used for the duplicate SYS-GEN.
- B. At TCL in the SYSPROG account, type:

SYS-GEN and press RETURN.

The duplicate copy of the SYS-GEN will be created. When the duplicate is complete, unload the duplicate SYS-GEN, label it, and store it in a safe place. Repeat Steps a and b to make as many copies of the SYS-GEN as you prefer.

7. You may now begin to load your application software.

Upgrading an Existing System

2 UPGRADING AN EXISTING SYSTEM

Use one of the following three upgrade methods:

1. FILE-RESTORE FROM SYS-GEN TAPE METHOD
2. FILE-RESTORE FROM FILE-SAVE TAPE METHOD

This method requires that you be on Rev 185 or higher.

3. SELECTIVE UPGRADE METHOD

This method requires that you be on Rev 185 or higher.

| FROM RELEASE | TO RELEASE | USE METHOD |
|------------------|------------|------------|
| prior to Rev 185 | Any 185 | 1 |
| Any 185 | Any 185 | 1, 2, or 3 |

Upgrading an Existing System

2.1 Method 1: The File-Restore From SYS-GEN Tape Method

1. Do a complete File-Save of the system.

You'll need the File-Save to restore your own accounts later in the upgrade. Follow the instructions in the Operations and Maintenance Guide to do a File-Save.

2. Make sure everyone is logged off the system. Then log on to the SYSPROG account. At TCL, enter:

:WARMSTOP and press RETURN.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the **:WARMSTOP** verb.

3. Mount the SYS-GEN tape, and bring to load point.
4. Boot the system.
5. If your disk(s) are new or have disk errors, format your disk(s). Section 3.1 of this manual explains formatting procedures.
6. If you formatted your disk, boot the system. The following screen will be displayed. If you did not format your disk, the following screen should already be displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iagnostics Monitor
(F)ile Restore
(W)armstart

Enter Option(s) or ? for help:

Enter F

Upgrading an Existing System

This initiates a complete File Restore. You will be doing a complete file-restore with the SYS-GEN tape only!

Information about your disc configuration will be displayed. A sample screen is shown following.

Disc Configuration

```
chan set name      #   of
0400  123 TEST      2   2
L 2000#  time    date  ABS  ULT  REL  XX
```

Tape 0 attached Block size: 8192

In the next screen, you will be asked for your system serial number.

Tape 0 attached Block size: 8192

System serial # is presently

Enter system serial # or <CR> to accept

Enter your System Serial Number

(i.e., the "TN," "NE," "NB," or "BV" number of the system). For example, enter BV1234. If the correct serial number is shown, press RETURN to accept it.

The following screen is displayed.

Upgrading an Existing System

```
Tape 0 attached Block size: 8192

System serial # is presently BVxxxx
Enter system serial # or <CR> to accept
```

Press RETURN if the number is correct.

You may re-enter the correct number if you made a mistake. Press RETURN after you enter the correct number.

The following screen is displayed.

```
Tape 0 attached Block size: 8192

System serial # is presently BVxxxx
Enter system serial # or <CR> to accept
Mount ABS tape and enter number of files to skip, if any:
```

Press RETURN.

Do not enter a number. Your SYS-GEN tape should already be mounted. The following screen is displayed.

Upgrading an Existing System

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN

WARNING: Do not mount your File-Save tape. (Your
SYS-GEN tape should already be mounted.)

Press RETURN.

The following screen is displayed.

Upgrading an Existing System

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN.

| L | 2000# | time | date | DATA | SYS-GEN |
|-------------------------|-------|------|------|------|---------|
| Seq# of this data tape: | 0 | 0 | 0 | 0 | 0 |

Is this the right tape (Y/N)?

Enter **Y** and press RETURN.

The File-Restore will begin. Each filename on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

Update/transaction tapes (Y/N)?

Enter **N** and press RETURN.

The following screen is displayed.

Upgrading an Existing System

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0
```

```
date      time      Logon Please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright      date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XXX      date      >>>
```

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

Press RETURN.

The following screen is displayed.

```
date      time      Logon Please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright      date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XXX      date      >>>
```

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

```
Linking secondary TCL workspaces
```

```
X additional task workspaces initialized
```

```
time      date
```

```
Time =
```

Upgrading an Existing System

Enter the time in military format (HH:MM:SS).

For example, enter 5PM as 17:00:00. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

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

Enter the date in the following format: MM/DD/YY.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

Upgrading an Existing System

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time date

Time = 17:00:00

17:00:00 date

Date = 02/03/86

17:00:00 03 FEB 1986

The system will display several messages. If there are any error messages (i.e.: System does not verify), call the Ultimate Support Group immediately.

The following screen will be displayed.

date time Logon please:

7. Load the WP (UltiWord), UTILINK, ATP, and ULTIMATION accounts. These steps necessary so that you may create a duplicate SYS-GEN, in Step 8 below.

- a. Logon to your SYSPROG account.
- b. Mount your SYS-GEN tape. Make sure it is at load point and on-line.
- c. From the SYSPROG main menu, select "Load WP account from SYS-GEN tape." The program will search for and load the WP account from the SYS-GEN tape.

Upgrading an Existing System

- d. When the WP account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load UTILINK account from SYS-GEN tape." The program will search for and load the UTILINK account from the SYS-GEN tape.
 - e. When the UTILINK account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ATP account from SYS-GEN tape." The program will search for and load the ATP account from the SYS-GEN tape.
 - f. When the ATP account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ULTIMATION account from SYS-GEN tape." The program will search for and load the ULTIMATION account from the SYS-GEN tape.
8. Create a duplicate SYS-GEN. Ultimate recommends that you create one or more copies for backup, in case your original SYS-GEN is missing or contains errors.
- a. Remove the SYS-GEN, and load a write-enabled blank tape (or spare formatted disk pack).
 - b. AT TCL on the SYSPROG account, type:
SYS-GEN and press RETURN.

When the duplicate SYS-GEN is complete, unload the tape or disk. Remove the duplicate SYS-GEN, label it, and store it in a safe place. Repeat this step to make as many copies as you prefer.

IMPORTANT: No application work should be done until the following steps have been completed.

9. If you were using UltiWord (the WP account) and ULTIMATION before the upgrade, then you must delete the WP and ULTIMATION accounts you loaded in Step 7. The WP account you loaded in Step 7 does not contain your WP user names or documents, and the ULTIMATION account you loaded in Step 7 does not contain your user codes and other setup information. You must use the DELETE-ACCOUNT command to delete the WP and ULTIMATION accounts now. (See the System Commands Guide for instructions on using the DELETE-ACCOUNT command. This command must be issued from the SYSPROG account.) You will be instructed to restore your original WP and ULTIMATION accounts in a later step. (Do not delete the UTILINK or ATP accounts.)

If you were not using WP or ULTIMATION before the upgrade, you do not have to delete these two accounts now.

Upgrading an Existing System

10. You are now ready to restore your own accounts. If you were using ULTIMATION before this upgrade, you will restore the ULTIMATION account in this step.

a. Logon to the SYSPROG account and go to TCL.

b. If you are upgrading from Rev 123 or later, type:

T-ATT and press RETURN.

If you are upgrading from a release prior to Rev 123, type:

T-ATT (O and press RETURN.

This indicates that you are restoring from an "old" style tape.

c. Mount the first reel of your File-Save from Step 1. Bring it to load point and on-line.

There are two methods to use in restoring your accounts. These are by using either the ACCOUNT-RESTORE verb or the ALL-ACCOUNT-RESTORE verb. The ALL-ACCOUNT-RESTORE will not work if your FILE-SAVE was not made from the FILE-SAVE proc supplied by The Ultimate Corp. If it was made from other sources, you must use the ACCOUNT-RESTORE verb.

If using the ALL-ACCOUNT-RESTORE method, proceed to Step d. If using the ACCOUNT-RESTORE method, proceed to Step e.

d. ALL-ACCOUNT-RESTORE method: Type:

RUN DICT SYSPROG-PL ALL-ACCOUNT-RESTORE

and press RETURN.

This program will restore all application accounts not already on the system, including the ULTIMATION account. When completed, go to Step 11. (Note that you cannot use update/transaction tapes with this method.)

e. ACCOUNT-RESTORE method: Type:

ACCOUNT-RESTORE accountname and press RETURN.

Use this command to individually restore all application accounts not on the system. Follow this procedure for each account you are restoring. Make

Upgrading an Existing System

and press RETURN.

- d. Make sure the SYS-GEN is at load point and on-line.
- e. Logon to the SYSPROG account and go to TCL.
- f. Type:

UPG-WP and press RETURN.

This program will load the new WP from the
SYS-GEN tape.

- g. Logon to WP.

The Conversion program will be called up
automatically. The following screen will be
displayed.

```
-----  
| DO YOU WANT TO CONTINUE WITH THE CONVERSION |  
| (Y/N):                                         |  
|-----|  
-----
```

Enter Y

to initiate the conversion.

- h. Go to Step 15.
14. Upgrade the WP account.

Do this step only if you are upgrading from
Rev123x, 124x, 125x, 130x, 135x, 140x, 150x, 160x, or
170x or later

- a. Make sure the SYS-GEN is at load point and on-line.
- b. Make sure you are logged on to the SYSPROG account and
at TCL.
- c. Type:

UPG-WP and press RETURN.

This program will load the new WP from the
SYS-GEN.

- 15. Enable WP in user accounts.

Upgrading an Existing System

Logon to the WP account.

The Word Processor Main Menu will be displayed, as shown following.

```
***** The Ultimate Corp. *****
***** WORD PROCESSING *****
***** Document Manager *****
          Main Menu
```

```
YOUR USER NAME:
DOCUMENT NAME:
```

```
(C)opy documents
(D)elete user
(E)dit/Enter
(L)ist
(N)ew
(P)rint
(S)et up user account
(U)tility
(V)iew
e(X)it
```

```
Enter option wanted:
```

Enter S.

This selects the program to set up user accounts. The following screen is displayed.

Upgrading an Existing System

```
***** The Ultimate Corp. *****
***** WORD PROCESSING *****
***** Document Manager *****
      Set up USER WP Menu
```

```
YOUR USER NAME:
DOCUMENT NAME:
```

```
Enter name of account to set up or <EDIT>
```

Enter the user account name you wish upgraded, and press RETURN.

The following screen is displayed.

Upgrading an Existing System

```
***** The Ultimate Corp. *****
***** WORD PROCESSING *****
***** Document Manager *****
      Set up USER WP Menu
```

YOUR USER NAME: _
DOCUMENT NAME: _

Enter name of account to set up or <EDIT>
The master dictionary of XXXX contains the
following

These will be overwritten if Y is answered. (Y)es
or <EDIT>

Enter Y.

You will now be able to use WP from this account. The program will update all necessary verbs and Q-pointers for the Ultimate Word Processor. Repeat these steps for each account on which you have WP. When complete, go to Step 16.

NOTE: If you get an error message such as "D/CC/CL Pointer Update Rejected," call the Ultimate Support Group.

16. Load in any utilities of your own that you may store in the SYSPROG account.
17. If you are upgrading from a release prior to Rev 130 and you use the DICT ACC for Logon purposes (ie: setting baud rate, terminal type), you will have to do a selective restore of the DICT ACC from your File-Save. Follow the steps below.
 - a. Mount your File-Save and bring it to load point.

Upgrading an Existing System

b. Logon to SYSPROG and go to TCL.

c. Type:

SEL-RESTORE DICT ACC * (O and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE DICT ACC * (O
Account name on tape:
```

Type:

ACC and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE DICT ACC * (O
Account name on tape: ACC
File name:
```

Type:

DICT ACC and press RETURN.

The selective-restore will begin.

d. After the selective-restore has been completed, type:

RUN DICT SYSPROG-PL ACCCONV and press RETURN.

Upgrading an Existing System

This program will convert all item IDs in the DICT ACC from a length of two to three.

18. If you are upgrading to Revision 180 or later, and if you store your own items in the TERMDEF file, then you must restore that file from your last file-save. Otherwise, the TERMDEF file will be recopied from the SYS-GEN, and the extra items you added to the file will not be present. Follow the steps below.

a. Mount your File-Save and bring it to load point and on-line.

b. Logon to SYSPROG and press RETURN to go to TCL.

c. Type:

SEL-RESTORE TERMDEF * and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE TERMDEF *
```

```
Account name on tape:
```

Type:

SYSPROG and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE TERMDEF *
```

```
Account name on tape: SYSPROG
```

```
File name:
```

Type:

TERMDEF and press RETURN.

Upgrading an Existing System

The selective-restore will begin.

When the selective-restore has completed, unload the File-Save tape and store it in a safe place.

19. Mount the SYS-GEN tape, and bring it to load point and on-line. Then log on to the SYSPROG account. At TCL, type:

UPG-REV and press RETURN.

A list of filenames will appear on your screen. Then the following message will appear.

If last file name displayed is 'DICT MD', Enter return
Else enter 'ABORT'

Press RETURN if the last filename displayed is DICT MD.

If the last filename displayed is not DICT MD, enter **ABORT**. You will return to TCL. Do not proceed. Call the Ultimate Support Group.

The following message will appear.

If last file name displayed is 'ULTINET MD', Enter return
Else enter 'END'

Press RETURN if the last filename displayed is ULTINET MD.

20. Restore your system Q-pointers. If you have any Q-pointers on your system, you must selectively-restore them from your file-save tape. System Q-pointers are normally stored at the end of the file-save, so if you have a multiple-reel file-save, the Q-pointers will be stored on the last reel. You must begin the sel-restore from reel 1 of your file-save. Then you will be instructed below to remove reel 1 and mount the last reel. Follow the steps below.

- a. Mount reel #1 of your File-Save and bring it to load

Upgrading an Existing System

- point and on-line.
- b. Logon to SYSPROG and press RETURN to go to TCL.
 - c. Type:

SEL-RESTORE SYSTEM * (N) and press RETURN.

The N option specifies that the file should be identified by its number, not by its name. The following screen is displayed.

```
>SEL-RESTORE SYSTEM * (N)
```

```
File #:
```

Type:

- 1 and press RETURN.

The selective-restore will begin. On your terminal, you should see the following.

```
1 SYSTEM
```

Then the tape will begin moving forward. At this point, press the BREAK key to interrupt the sel-restore. Then rewind and unload the first reel of the file-save, and load the last reel of your file-save. Once that reel is on-line, on the terminal type G and press RETURN to resume the sel-restore. Your system Q-pointers will be restored.

When the selective-restore has completed, unload the File-Save tape and store it in a safe place.

21. Reload UltiCalc.

If you were using UltiCalc before the upgrade, you must re-install UltiCalc. To do so, log on to the ULTICALC account. At the UltiCalc menu, enter I to select Install UltiCalc on the system.

If you were not using UltiCalc before the upgrade, then go on to Step 22.

Upgrading an Existing System

22. The upgrade is now complete. You may now logon and begin your normal work. Keep the File-Save from Step 1 from your previous release for future reference.

Upgrading an Existing System

2.2 Method 2: The File-Restore From File-Save Tape Method

This method can be used if you are upgrading Rev 185 or later.

NOTE: All users must be off the system until the upgrade is complete.

1. Do a complete File-Save of the system.

You'll need the File-Save to restore your own accounts later in the upgrade. Follow the instructions in the Operations and Maintenance Guide to do a File-Save.

2. Make sure everyone is logged off the system. Then log to the SYSPROG account. At TCL, enter:

:WARMSTOP and press RETURN.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the :WARMSTOP verb.

3. Mount the SYS-GEN tape, and bring it to load point.
4. Boot the system (see Appendix A for instructions). The following screen is displayed.
5. If your disk(s) are new or have disk errors, format your disk(s). Section 3.1 of this manual explains the formatting process.
6. If you formatted your disk, boot the system (see instructions in Appendix A.) The following screen will be displayed. If you did not format your disk, the following screen should already be displayed.

Upgrading an Existing System

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iagnostics Monitor
(F)ile Restore
(W)armstart

Enter Option(s) or ? for help:

Enter **F**

This initiates a complete File-Restore.

Information about your disc configuration will be displayed. A sample screen is shown below.

Disc Configuration

| chan | set | name | # | of |
|------|-------|------|------|----------------|
| 0400 | 123 | TEST | 1 | 1 |
| L | 2000# | time | date | ABS ULT REL XX |

Tape 0 attached Block size: 8192

In the next screen, you will be asked for your system serial number.

Upgrading an Existing System

Tape 0 attached Block size: 8192

System serial # is presently

Enter system serial # or <CR> to accept

Enter your System Serial Number

(i.e., the "TN," "NE," "NB," or "BV" number of the system). For example, enter BV1234. If the present serial number is shown, and is correct, press RETURN to accept it.

The screen shown below is displayed.

Tape 0 attached Block size: 8192

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Press RETURN if the number is correct.

You may re-enter the correct number if you made a mistake. Press RETURN after you enter the correct number.

The following screen is displayed.

Upgrading an Existing System

Tape 0 attached Block size: 8192

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

Press RETURN.

Do not enter a number. Your SYS-GEN tape should already be mounted. The following screen is displayed.

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

XX-XXX

XXXX-XXX

XXXX-XXX

XXXX-XXX

XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN

Unload the SYS-GEN tape. Then mount the first reel (or pack) of the File-Save tape (or disk) and bring it to load point.

Press RETURN.

If you have a multi-reel File-Save, you will be prompted at the end of each reel to mount the next

Upgrading an Existing System

one.

The following screen is displayed.

```
Mount ABS tape and enter number of files to skip, if any:
```

```
XX-XXX  
XXXX-XXX  
XXXX-XXX  
XXXX-XXX  
XXXX-XXXX
```

```
Spooler started
```

```
Mount DATA tape and press RETURN
```

```
L 2000#  time      date      DATA  
Seq# of this data tape:  0    0    0    0  
Is this the right tape (Y/N)?
```

Check the tape label displayed to verify that this is your most recent File-Save tape (or disk).

Enter **Y** and press RETURN.

The File-Restore will begin. Each filename on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

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

Enter **N** and press RETURN.

The following screen is displayed.

Upgrading an Existing System

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0

date      time      Logon Please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright      date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XX      date      >>>
This is the Cold-Start Procedure
Enter <CR> to continue
```

Press RETURN.

The following screen is displayed.

```
date      time      Logon Please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright      date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XX      date      >>>

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time      date

Time =
```

Enter the time in military format (HH:MM:SS).

Upgrading an Existing System

For example, enter 5PM as 17:00:00. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time          date

Time = 17:00:00
17:00:00     date
Date =
```

Enter the date in the following format: MM/DD/YY.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time          date

Time = 17:00:00
17:00:00     date
Date = 02/03/86
17:00:00     03 FEB 1986
```

The system will display several messages. One error

Upgrading an Existing System

message, "Ultimate Operating System does not Verify," is to be expected at this time. The system will verify when the upgrade is complete.

The following screen will be displayed.

```
-----  
|  
| date      time      Logon please:  
|  
|-----|
```

IMPORTANT: No Application work should be done until the following steps have been completed.

7. Logon to the SYSPROG account and go to TCL.
8. Mount the SYS-GEN, bring to load point and put on-line.
9. Upgrade the Master Dictionary of SYSPROG. Type:
T-SPACE 19 and press RETURN.

WARNING: This will skip 19 files on tape. The names of the files will be displayed on the screen. If the last file listed is not the "STAT-FILE," do not proceed. Call the Ultimate Support Group.

10. Type:
T-LOAD MD (O,I) and press RETURN.
11. Upgrade files in the SYSPROG, WP, and ULTINET accounts.
 - a. Make sure the SYS-GEN is at load point and on-line.
 - b. Make sure you are logged on to the SYSPROG account and at TCL.
 - c. Type:
UPG-REV and press RETURN.

The following message is displayed.

Upgrading an Existing System

If last file name displayed is 'DICT MD', Enter return
Else enter 'ABORT'

Press RETURN if the last filename displayed is "DICT MD."

If the last file name displayed is not "DICT MD," enter **ABORT**. You will return to TCL. Do Not Proceed. Call the Ultimate Support Group.

Once you press RETURN, the files to be upgraded will be loaded in the SYSPROG and WP accounts. If your system includes UltiNet, the following message will appear.

If last file name displayed is 'ULTINET MD', Enter return
Else enter 'END'

Press RETURN if the last filename displayed is ULTINET MD.

Your ULTINET account will be upgraded.

12. Make sure you are logged on to the SYSPROG account and at TCL.

13. Type:

RUN DICT SYSPROG-PL UPG.NEWAC and press RETURN.

The program will display names of all application accounts to be upgraded. The following message is displayed.

(C)ontinue or (Q)uit?

Upgrading an Existing System

Enter C

The system will now upgrade the Master Dictionary of each user account displayed.

14. Check to see if the system verifies. From the SYSPROG account, go to TCL.

Type:

VERIFY-SYSTEM and press RETURN.

The system should now verify. If there is any mismatch, call the Ultimate Support Group.

15. Reload ULTICALC.

If you were using UltiCalc before the upgrade, you must re-install it. To do so, log on to the ULTICALC account. At the UltiCalc menu, enter I to select Install UltiCalc on the system.

16. Create a Boot tape.

A boot tape contains only the programs needed to boot your system. A SYS-GEN contains the programs to boot your system, and it also contains system accounts and system files. Ultimate recommends that you create a boot tape now, and that you create a duplicate SYS-GEN at the time of your next File-Restore.

Follow the instructions in the System Commands Guide and the System Management and Support Guide to create a boot tape and a duplicate SYS-GEN tape.

17. The upgrade is now complete. You may logon and begin your normal work. Keep the File-Save from Step 1 from your previous release for future reference.

Upgrading an Existing System

2.3 Method 3: The Selective Upgrade Method

This method can be used if you are upgrading from Rev 185AX or later.

NOTE: All users must be off the system until the upgrade is complete.

1. Make sure everyone is logged off the system. Do a complete File-Save of the system.

This step is important in ensuring that you'll be able to recover your files in the event of a mishap during the upgrade. Ultimate strongly recommends that you take the time to do this now. Otherwise, you may spend hours trying to recover your files later, in the event of a problem.

2. Logon to the SYSPROG account and go to TCL.

Type:

CLEAR-FILE DATA UFOS and press **RETURN**.

The "UFOS" file must be cleared to ensure that old patches will not be applied to the new system.

3. You should still be in the SYSPROG account. At TCL, type:

:WARMSTOP and press **RETURN**.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the **:WARMSTOP** verb.

4. Mount the SYS-GEN tape (or disk) and bring it to load point.
5. Boot the system (see instructions in Appendix A).

The following screen is displayed.

Upgrading an Existing System

This is the Ultimate Operating System

System Startup Options:

- (C)oldstart
- (D)iagnostics Monitor
- (F)ile Restore
- (W)armstart

Enter Option(s) or ? for help:

Enter C

This initiates a Cold-Start.

In the next screen, you will be asked for your system serial number.

System serial # is presently

Enter system serial # or <CR> to accept

Enter your System Serial Number

(i.e., the "TN," "NE," "NB," or "BV" number of the system). For example, enter BV1234. If the correct serial number is shown, press RETURN to accept it.

The screen shown below is displayed.

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Upgrading an Existing System

```
date      time  Logon Please:
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright   date    The Ultimate Corp. >>>
<<<   time   Release XX Rev XXX   date   >>>

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time      date

Time =
```

Enter the time in military format (HH:MM:SS).

For example, enter 5PM as 17:00:00. The following screen is displayed.

Upgrading an Existing System

```
This is the Cold-Start Procedure
Enter <CR> to continue
Linking secondary TCL workspaces

X additional task workspaces initialized
```

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

Enter the date in the following format: MM/DD/YY.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized
```

```
08:06:42    24 AUG 1986
```

```
Time = 17:00:00
17:00:00    date
Date = 02/03/86
17:00:00    03 FEB 1986
```

The system will display several messages. One error message, "Ultimate Operating System does not Verify," is to be expected at this time. The system will verify when the upgrade is complete.

Upgrading an Existing System

If last file name displayed is 'DICT MD' Enter return
Else enter 'ABORT'

Press RETURN if the last filename displayed is "DICT MD."

If the last file name displayed is not "DICT MD," enter **ABORT**. You will return to TCL. Do Not Proceed. Call the Ultimate Support Group.

Once you press RETURN, the files to be upgraded will be loaded in the SYSPROG and WP accounts. If your system includes UltiNet, the following message will appear.

If last file name displayed is 'ULTINET MD', Enter return
Else enter 'END'

Press RETURN if the last filename displayed is ULTINET MD.

Your ULTINET account will be upgraded.

11. At TCL, type:

RUN DICT SYSPROG-PL UPG.NEWAC and press RETURN.

The program will display names of all application accounts to be upgraded. The following message is displayed.

(C)ontinue or (Q)uit?

Upgrading an Existing System

Enter C

The system will now upgrade the Master Dictionary of each user account.

12. Check to see if the system verifies. From the SYSPROG account, go to TCL.

Type:

VERIFY-SYSTEM and press RETURN.

The system should now verify. If there is any mismatch, call the Ultimate Support Group.

13. Remove the SYS-GEN tape from your system.
14. Create a Boot tape.

A boot tape contains only the programs needed to boot your system. A SYS-GEN contains the programs to boot your system, and it also contains system accounts and system files. Ultimate recommends that you create a boot tape now, and that you create a duplicate SYS-GEN at the time of your next File-Restore.

Follow the instructions in the System Commands Guide and the System Management and Support Guide to create a boot tape and a duplicate SYS-GEN tape.

15. The upgrade is now complete. You may logon and begin your normal work. Keep the File-Save from Step 1 from your previous release for future reference.

Ultimate recommends that a File-Save and Full-Restore be done as soon as possible.

Diagnosics Monitor

3 FORMATTING A DISK DRIVE

The Diagnosics Monitor is run off-line. This means that you are not able to run your system in the normal mode. Only line zero is activated. The Ultimate Diagnosics Monitor has two modes of operation:

1. Formatting
2. Maintenance

This document will only discuss the option for formatting your disk (consult the Diagnosics Monitor Manual for more detailed information).

1. Make sure you've followed the Booting instructions in Section 5.
2. At the System Startup Options menu, enter D.

This will load the Diagnosics Monitor. The following screen will be displayed.

```
-----  
ST506 disc sub-system  
Format and disc diagnostic utility
```

```
(F)ormat a drive  
(B)ad sector map read  
(R)ead disc parameters (vtoc)  
(W)rite disc parameters (vtoc)  
(D)rive diagnostics menu  
(S)ystem debugger module  
(E)xit to options menu
```

```
Select option:
```

```
Enter F
```

The following screen is displayed.

Diagnostics Monitor

```
ST506 disc sub-system
Format and disc diagnostic utility
```

```
(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu
```

Select option: F

Enter drive number (0-2)

Enter the number of the drive (0,1,or 2) that you want to format.

The following screen is displayed.

```
ST506 disc sub-system
Format and disc diagnostic utility
```

```
(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu
```

Select option: F

Enter drive number (0-2).. 0
Enter (Y)es to continue

Type Y to continue the formatting process. This will destroy all previous data on the disc.

Diagnostics Monitor

The following screen is displayed.

```
-----  
ST506 disc sub-system  
Format and disc diagnostic utility
```

```
(F)ormat a drive  
(B)ad sector map read  
(R)ead disc parameters (vtoc)  
(W)rite disc parameters (vtoc)  
(D)rive diagnostics menu  
(S)ystem debugger module  
(E)xit to options menu
```

```
Select option: F
```

```
Enter drive number (0-2).. 0  
Enter (Y)es to continue... Y  
Use bad sector map (Y/N)
```

```
-----  
Enter:
```

```
Y to make sure previous bad tracks are marked defective  
N if you don't want to save previously marked bad tracks
```

```
CAUTION: If you are formatting a new drive, you must enter  
N at this prompt. Then, at any time in the future  
when formatting the drive, you may enter Y.
```

The following screen is displayed.

Diagnostics Monitor

ST506 disc sub-system
Format and disc diagnostic utility

(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu

Select option: F

Enter drive number (0-2).. 0
Enter (Y)es to continue... Y
Use bad sector map (Y/N).. N

Verifying
cyl:xxxx trk:xx
Writing map
Writing VTOC

Once these messages have been displayed, then the formatting process is complete.

Booting the System

APPENDIX A: BOOTING THE SYSTEM

Throughout this manual, you will be asked to "boot" or "initialize the system." The following steps describe the procedure.

1. Make sure the AC PRESENT light is ON. (Refer to the POWERING ON instructions in Section 2.)
2. Load the Ultimate SYS-GEN tape. (Refer to the tape loading instructions in Section 4.)
3. If both the AC PRESENT and DC ON lights are on, press the RESET button. If only the AC PRESENT light is on, press the POWER ON button. The following screen will be displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iaagnostic Monitor
(F)ile Restore
(W)armstart

Enter Option:

-
4. Refer to Section 6 for information on each of the System Startup Options.

NOTE: If the system was :WARMSTOPPED prior to being powered off, refer to Section 6.7 to WARMSTART the system. If the system was not :WARMSTOPPED prior to being powered off, then refer to Section 6.2 to COLDSTART the system.

Booting the System

APPENDIX B: LIST OF ACCOUNTS ON THE SYS-GEN

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:)
  SYSTEM
  SYSTEM-ERRORS
  BLOCK-CONVERT
  SECURITY
  PROCLIB
  SYSLIB
  SYSTEM (Synonym)
  SYSPROG
  ERRMSG
  SPSYM
  GAMES
  TRAINING
  ACC
  SYSTEM (Q-pointers, etc.)
  T-DUMP of STAT-FILE
```

Several files are T-DUMPed at the end of the SYS-GEN tape. These files are used for the selective upgrade method, and for updating the WP, ATP, UTILINK, and ULTIMATION accounts. To position the tape at the first file, do 19 T-FWDs from load point. The files are dumped as follows.

| | |
|--------------------|----------------------------|
| SYSPROG MD | DOCUMENT,SYSTEM |
| DICT NEWAC | DICT UFOS |
| ERRMSG | UFOS |
| DICT SYSLIB | DICT REALLOC-FILE |
| SYSLIB | WP Master Dictionary |
| DICT TERMDEF | DICT WP-PROGS |
| TERMDEF | WP-PROGS, TABLES |
| CONVERSION,DOC | DICT SPSYM |
| CONVERSION,PGM | SPSYM |
| CONVERSION,PROC | SPSYM,DF |
| CONVERSION,TABLE | account-save of WP |
| OSYM | account-save of ATP |
| PSYM | account-save of UTILINK |
| DICT STAT-FILE | account-save of ULTIMATION |
| DICT BLOCK-CONVERT | ULTINET MD |
| USER-MODES | ULTINET BP |
| USER-MODES, SOURCE | |
| DICT SYSPROG-PL | |
| DICT ACC | |
| DICT SYS-ERRS | |
| DICT DOCUMENT | |
| DOCUMENT | |

Booting the System

DOCUMENT, DELTA
DOCUMENT, UPG

OLD

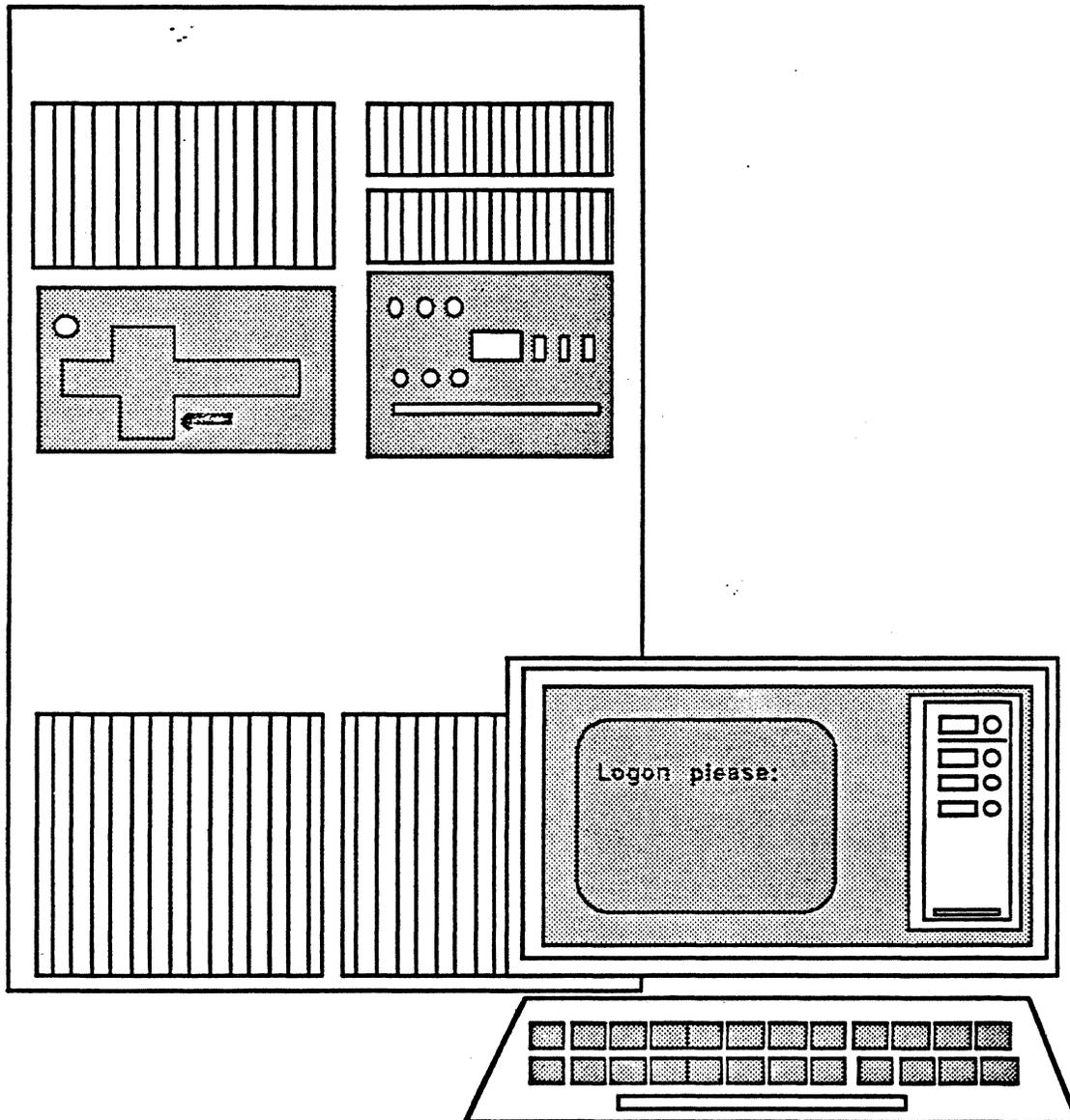
4032

NEW

4300

ULT

1400 Series Upgrade Procedures



THE ULTIMATE CORP.



1400 Series
Upgrade Procedures

PROPRIETARY INFORMATION

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How To Use This Manual

HOW TO USE THIS MANUAL

The procedures in this document explain how to upgrade from your current Ultimate software to the latest software release. This document also includes instructions for those who are bringing up a new system.

These procedures involve your SYS-GEN tape or disk pack. The SYS-GEN is used to generate or reboot your Ultimate system.

Although the SYS-GEN tape can be used to generate or boot all Ultimate systems, this document is intended for Honeywell 1400 Series systems only. If you have any problems, contact the Ultimate Support Group.

The following topics are discussed in this manual:

Section 1 describes **BRINGING UP A VIRGIN SYSTEM**. This section should be followed if your Ultimate system is new, and does not contain any software.

Section 2 describes the procedure for **UPGRADING AN EXISTING SYSTEM**. This section explains the step-by-step method of updating the Ultimate Operating System without affecting the data in your company's files.

Section 3 explains the procedure for **FORMATTING A DISK DRIVE**.

Appendix A contains instructions for **BOOTING THE SYSTEM**. Refer to these instructions whenever you are asked to "boot or initialize the system."

Appendix B contains a **LIST OF ACCOUNTS ON THE SYS-GEN**. This list may help you locate a particular account.

Bringing Up a Virgin System

1 BRINGING UP A VIRGIN SYSTEM

If you are bringing up a new system, follow the instructions below to load the ULTIMATE system software onto your system. These instructions can only be performed from the line zero terminal (console).

1. Begin by formatting your disk drive(s). First, you must Power On to the system.
 - A. Locate the main POWER switch on the back and turn to the ON position. If you have a dual-cabinet system, be sure to turn on both POWER switches.
 - B. Make sure the AC PRESENT light is lit.
 - C. If your system includes a 1/2" reel tape drive, turn the POWER switch on.
2. Boot the system. If you are rebooting a system that is up and running, you must first do a :WARMSTOP from the SYSPROG account.
 - A. Load the Ultimate SYS-GEN tape. (Refer to the tape-loading instructions in Section 4 of the Operations and Maintenance manual.)
 - B. If both the AC PRESENT and DC ON lights are on, press the RESET button. If only the AC PRESENT light is on, press the POWER ON button. The following screen will be displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iagnostic Monitor
(F)ile Restore
(W)armstart

Enter option:

- C. Refer to Section 6 of the Operations and Maintenance manual for information on each of the System Startup Options.

NOTE: If the system was :WARMSTOPPED prior to being powered off, refer to Section 6.7 of the Operations and

Bringing Up a Virgin System

Maintenance manual to WARMSTART the system. If the system was not :WARMSTOPPED prior to being powered off, then refer to Section 6.2 to COLDSTART the system.

3. If your disk(s) are new or have disk errors, format your disk(s). Otherwise, proceed to the next step. Section 3.1 of this manual explains formatting procedures.
4. If you formatted your disk(s), boot the system. The previous screen will be displayed.

If you did not format your disk, the previous screen should already be displayed.

At the prompt to select an option, enter F.

This initiates a complete File-Restore. You will be doing a complete file-restore with the SYS-GEN tape only!

Information about your disc configuration will be displayed. A sample screen is shown below.

Disc Configuration

```
chan      set name      #    of
FF20     Ultimate 1400   1    1
L 2000#   time date   ABS ULT REL XX
Tape 0 attached Block size: 8192
```

In the next screen, you will be asked for your system serial number.

```
Tape 0 attached Block size: 8192
System serial # is presently
Enter system serial # or <CR> to accept
```

Enter your System Serial Number

(i.e., the "TN," "NE," "NB," or "BV" number of the system). For example, enter BV1234. If the correct serial number is shown, press RETURN to accept it.

Bringing Up a Virgin System

The following screen is displayed.

```
Tape 0 attached Block size: 8192

System serial # is presently BVxxxx

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

Press RETURN if the number is correct.

You may re-enter the correct number if you made a mistake. Press RETURN after you enter the correct number.

The following screen is displayed.

```
Tape 0 attached Block size: 8192

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:
```

Press RETURN.

Do not enter a number. (Your SYS-GEN tape should already be mounted.) The following screen is displayed.

Bringing Up a Virgin System

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

XX-XXX

XXXX-XXX

XXXX-XXX

XXXX-XXX

XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN

WARNING: Do not mount your File-Save tape. Your SYS-GEN tape should already be mounted.

Press RETURN.

The following screen is displayed.

Bringing Up a Virgin System

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN
L 2000# time date DATA SYS-GEN
Seq# of this data tape: 0 0 0 0
Is this the right tape (Y/N)?

Enter **Y** and press RETURN.

The File-Restore will begin. Each filename on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

Update/transaction tapes (Y/N)?

Enter **N** and press RETURN.

The following screen is displayed.

Bringing Up a Virgin System

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0
```

```
date      time      Logon Please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright   date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XXX   date      >>>
```

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

Press RETURN.

The following screen is displayed.

```
date      time      Logon Please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright   date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XXX   date      >>>
```

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

```
Linking secondary TCL workspaces
```

```
X additional task workspaces initialized
```

```
time      date
```

```
Time =
```

Bringing Up a Virgin System

Enter the time in military format (HH:MM:SS).

For example, enter 5PM as 17:00:00. The following screen is displayed.

```
-----  
This is the Cold-Start Procedure  
Enter <CR> to continue  
  
Linking secondary TCL workspaces  
  
X additional task workspaces initialized  
  
time      date  
  
Time = 17:00:00  
17:00:00  date  
Date =
```

Enter the date in the following format: MM/DD/YY.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

Bringing Up a Virgin System

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

```
Linking secondary TCL workspaces
```

```
X additional task workspaces initialized
```

```
time      date
```

```
Time = 17:00:00
```

```
17:00:00    date
```

```
Date = 02/03/86
```

```
17:00:00    03 FEB 1986
```

The system will display several messages. If there are any error messages (i.e.: System does not verify), call the Ultimate Support Group immediately.

The following screen will be displayed.

```
date      time      Logon please:
```

5. Load the WP (UltiWord), UTILINK, ATP, and ULTIMATION accounts.
 - A. Logon to your SYSPROG account.
 - B. Mount your SYS-GEN tape. Make sure it is at load point and on-line.
 - C. From the SYSPROG main menu, select "Load WP account from SYS-GEN tape." The program will search for and load the WP account from the SYS-GEN tape.
 - D. When the WP account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load UTILINK account from SYS-GEN

Bringing Up a Virgin System

tape." The program will search for and load the UTILINK account from the SYS-GEN tape.

- E. When the UTILINK account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ATP account from SYS-GEN tape." The program will search for and load the ATP account from the SYS-GEN tape.
- F. When the ATP account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ULTIMATION account from SYS-GEN tape." The program will search for and load the ULTIMATION account from the SYS-GEN tape.

6. Create a duplicate SYS-GEN.

Ultimate recommends that you create one or more copies of the SYS-GEN for backup, in case your original SYS-GEN is missing or contains errors.

- A. Remove the SYS-GEN, and mount a write-enabled blank tape (or spare formatted disk pack) to be used for the duplicate SYS-GEN.
- B. At TCL in the SYSPROG account, type:

SYS-GEN and press RETURN.

The duplicate copy of the SYS-GEN will be created. When the duplicate is complete, unload the duplicate SYS-GEN, label it, and store it in a safe place. Repeat Steps a and b to make as many copies of the SYS-GEN as you prefer.

7. You may now begin to load your application software.

Upgrading an Existing System

2 UPGRADING AN EXISTING SYSTEM

The only way to upgrade a 1400 Series system is to do a File-Restore from your SYS-GEN tape. (This is often referred to as Method 1.) If you are upgrading your 1400 system, follow the instructions in this section. (For those of you who have used other methods on different systems, be sure to use this method only on the 1400 Series systems.)

1. Do a complete File-Save of the system.

You'll need the File-Save to restore your own accounts later in the upgrade. Follow the instructions in the Operations and Maintenance Guide to do a File-Save.

2. Make sure everyone is logged off the system. Then log on to the SYSPROG account. At TCL, enter:

:WARMSTOP and press RETURN.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the :WARMSTOP verb.

3. Mount the SYS-GEN tape, and bring to load point.
4. Boot the system.
5. If your disk(s) are new or have disk errors, format your disk(s). Section 3.1 of this manual explains formatting procedures.
6. If you formatted your disk, boot the system. The following screen will be displayed. If you did not format your disk, the following screen should already be displayed.

Upgrading an Existing System

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iagnostics Monitor
(F)ile Restore
(W)armstart

Enter Option(s) or ? for help:

Enter **F**

This initiates a complete File Restore. You will be doing a complete file-restore with the SYS-GEN tape only!

Information about your disc configuration will be displayed. A sample screen is shown following.

Disc Configuration

| chan | set | name | # | of | |
|---------|------|------|-----|-----|--------|
| 0400 | 123 | TEST | 2 | 2 | |
| L 2000# | time | date | ABS | ULT | REL XX |

Tape 0 attached Block size: 8192

In the next screen, you will be asked for your system serial number.

Upgrading an Existing System

Tape 0 attached Block size: 8192

System serial # is presently

Enter system serial # or <CR> to accept

Enter your System Serial Number

(i.e., the "TN," "NE," "NB," or "BV" number of the system). For example, enter BV1234. If the correct serial number is shown, press RETURN to accept it.

The following screen is displayed.

Tape 0 attached Block size: 8192

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Press RETURN if the number is correct.

You may re-enter the correct number if you made a mistake. Press RETURN after you enter the correct number.

The following screen is displayed.

Upgrading an Existing System

Tape 0 attached Block size: 8192

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

Press RETURN.

Do not enter a number. Your SYS-GEN tape should already be mounted. The following screen is displayed.

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN

WARNING: Do not mount your File-Save tape. (Your SYS-GEN tape should already be mounted.)

Press RETURN.

The following screen is displayed.

Upgrading an Existing System

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN
L 2000# time date DATA SYS-GEN
Seq# of this data tape: 0 0 0 0
Is this the right tape (Y/N)?

Enter **Y** and press RETURN.

The File-Restore will begin. Each filename on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

Update/transaction tapes (Y/N)?

Enter **N** and press RETURN.

The following screen is displayed.

Upgrading an Existing System

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0
```

```
date      time      Logon Please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright   date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XXX   date      >>>
```

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

Press RETURN.

The following screen is displayed.

```
date      time      Logon Please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright   date      The Ultimate Corp. >>>
<<<   time      Release XX Rev XXX   date      >>>
```

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

```
Linking secondary TCL workspaces
```

```
X additional task workspaces initialized
```

```
time      date
```

```
Time =
```

Upgrading an Existing System

Enter the time in military format (HH:MM:SS).

For example, enter 5PM as 17:00:00. The following screen is displayed.

```
-----  
This is the Cold-Start Procedure  
Enter <CR> to continue  
  
Linking secondary TCL workspaces  
  
X additional task workspaces initialized  
  
time      date  
  
Time = 17:00:00  
17:00:00  date  
Date =
```

Enter the date in the following format: MM/DD/YY.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

Upgrading an Existing System

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

```
Linking secondary TCL workspaces
```

```
X additional task workspaces initialized
```

```
time      date
```

```
Time = 17:00:00
```

```
17:00:00    date
```

```
Date = 02/03/86
```

```
17:00:00    03 FEB 1986
```

The system will display several messages. If there are any error messages (i.e.: System does not verify), call the Ultimate Support Group immediately.

The following screen will be displayed.

```
date      time      Logon please:
```

7. Load the WP (UltiWord), UTILINK, ATP, and ULTIMATION accounts. These steps necessary so that you may create a duplicate SYS-GEN, in Step 8 below.
 - a. Logon to your SYSPROG account.
 - b. Mount your SYS-GEN tape. Make sure it is at load point and on-line.
 - c. From the SYSPROG main menu, select "Load WP account from SYS-GEN tape." The program will search for and load the WP account from the SYS-GEN tape.

Upgrading an Existing System

- d. When the WP account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load UTILINK account from SYS-GEN tape." The program will search for and load the UTILINK account from the SYS-GEN tape.
 - e. When the UTILINK account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ATP account from SYS-GEN tape." The program will search for and load the ATP account from the SYS-GEN tape.
 - f. When the ATP account has been loaded, type **SYSPROG** and press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ULTIMATION account from SYS-GEN tape." The program will search for and load the ULTIMATION account from the SYS-GEN tape.
8. Create a duplicate SYS-GEN. Ultimate recommends that you create one or more copies for backup, in case your original SYS-GEN is missing or contains errors.
- a. Remove the SYS-GEN, and load a write-enabled blank tape (or spare formatted disk pack).
 - b. AT TCL on the SYSPROG account, type:

SYS-GEN and press RETURN.

When the duplicate SYS-GEN is complete, unload the tape or disk. Remove the duplicate SYS-GEN, label it, and store it in a safe place. Repeat this step to make as many copies as you prefer.

IMPORTANT: No application work should be done until the following steps have been completed.

9. If you were using UltiWord (the WP account) and ULTIMATION before the upgrade, then you must delete the WP and ULTIMATION accounts you loaded in Step 7. The WP account you loaded in Step 7 does not contain your WP user names or documents, and the ULTIMATION account you loaded in Step 7 does not contain your user codes and other setup information. You must use the DELETE-ACCOUNT command to delete the WP and ULTIMATION accounts now. (See the System Commands Guide for instructions on using the DELETE-ACCOUNT command. This command must be issued from the SYSPROG account.) You will be instructed to restore your original WP and ULTIMATION accounts in a later step. (Do not delete the UTILINK or ATP accounts.)

If you were not using WP or ULTIMATION before the upgrade, you do not have to delete these two accounts now.

Upgrading an Existing System

10. You are now ready to restore your own accounts. If you were using ULTIMATION before this upgrade, you will restore the ULTIMATION account in this step.

a. Logon to the SYSPROG account and go to TCL.

b. If you are upgrading from Rev 123 or later, type:

T-ATT and press RETURN.

If you are upgrading from a release prior to Rev 123, type:

T-ATT (O and press RETURN.

This indicates that you are restoring from an "old" style tape.

c. Mount the first reel of your File-Save from Step 1. Bring it to load point and on-line.

There are two methods to use in restoring your accounts. These are by using either the ACCOUNT-RESTORE verb or the ALL-ACCOUNT-RESTORE verb. The ALL-ACCOUNT-RESTORE will not work if your FILE-SAVE was not made from the FILE-SAVE proc supplied by The Ultimate Corp. If it was made from other sources, you must use the ACCOUNT-RESTORE verb.

If using the ALL-ACCOUNT-RESTORE method, proceed to Step d. If using the ACCOUNT-RESTORE method, proceed to Step e.

d. ALL-ACCOUNT-RESTORE method: Type:

RUN DICT SYSPROG-PL ALL-ACCOUNT-RESTORE

and press RETURN.

This program will restore all application accounts not already on the system, including the ULTIMATION account. When completed, go to Step 11. (Note that you cannot use update/transaction tapes with this method.)

e. ACCOUNT-RESTORE method: Type:

ACCOUNT-RESTORE accountname and press RETURN.

Use this command to individually restore all application accounts not on the system. Follow this procedure for each account you are restoring. Make

Upgrading an Existing System

and press RETURN.

d. Make sure the SYS-GEN is at load point and on-line.

e. Logon to the SYSPROG account and go to TCL.

f. Type:

UPG-WP and press RETURN.

This program will load the new WP from the
SYS-GEN tape.

g. Logon to WP.

The Conversion program will be called up
automatically. The following screen will be
displayed.

```
-----  
| DO YOU WANT TO CONTINUE WITH THE CONVERSION |  
| (Y/N):                                         |  
|-----|  
-----
```

Enter Y

to initiate the conversion.

h. Go to Step 15.

14. Upgrade the WP account.

Do this step only if you are upgrading from
Rev123x, 124x, 125x, 130x, 135x, 140x, 150x, 160x, or
170x or later

a. Make sure the SYS-GEN is at load point and on-line.

b. Make sure you are logged on to the SYSPROG account and
at TCL.

c. Type:

UPG-WP and press RETURN.

This program will load the new WP from the
SYS-GEN.

15. Enable WP in user accounts.

Upgrading an Existing System

Logon to the WP account.

The Word Processor Main Menu will be displayed, as shown following.

```
***** The Ultimate Corp. *****
***** WORD PROCESSING *****
***** Document Manager *****
          Main Menu

YOUR USER NAME:
DOCUMENT NAME:

(C)opy documents
(D)elete user
(E)dit/Enter
(L)ist
(N)ew
(P)rint
(S)et up user account
(U)tility
(V)iew
e(X)it
```

Enter option wanted:

Enter **S**.

This selects the program to set up user accounts. The following screen is displayed.

Upgrading an Existing System

```
***** The Ultimate Corp. *****  
***** WORD PROCESSING *****  
***** Document Manager *****  
      Set up USER WP Menu  
  
YOUR USER NAME:  
DOCUMENT NAME:  
  
Enter name of account to set up or <EDIT>
```

Enter the user account name you wish upgraded, and press RETURN.

The following screen is displayed.

Upgrading an Existing System

```
***** The Ultimate Corp. *****
***** WORD PROCESSING *****
***** Document Manager *****
      Set up USER WP Menu
```

```
YOUR USER NAME: _
DOCUMENT NAME:  _
```

```
Enter name of account to set up or <EDIT>
The master dictionary of XXXX contains the
following
```

```
These will be overwritten if Y is answered. (Y)es
or <EDIT>
```

Enter Y.

You will now be able to use WP from this account. The program will update all necessary verbs and Q-pointers for the Ultimate Word Processor. Repeat these steps for each account on which you have WP. When complete, go to Step 16.

NOTE: If you get an error message such as "D/CC/CL Pointer Update Rejected," call the Ultimate Support Group.

16. Load in any utilities of your own that you may store in the SYSPROG account.
17. If you are upgrading from a release prior to Rev 130 and you use the DICT ACC for Logon purposes (ie: setting baud rate, terminal type), you will have to do a selective restore of the DICT ACC from your File-Save. Follow the steps below.
 - a. Mount your File-Save and bring it to load point.

Upgrading an Existing System

b. Logon to SYSPROG and go to TCL.

c. Type:

SEL-RESTORE DICT ACC * (0 and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE DICT ACC * (0
Account name on tape:
```

Type:

ACC and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE DICT ACC * (0
Account name on tape: ACC
File name:
```

Type:

DICT ACC and press RETURN.

The selective-restore will begin.

d. After the selective-restore has been completed, type:

RUN DICT SYSPROG-PL ACCCONV and press RETURN.

Upgrading an Existing System

This program will convert all item IDs in the DICT ACC from a length of two to three.

18. If you are upgrading to Revision 180 or later, and if you store your own items in the TERMDEF file, then you must restore that file from your last file-save. Otherwise, the TERMDEF file will be recopied from the SYS-GEN, and the extra items you added to the file will not be present. Follow the steps below.
 - a. Mount your File-Save and bring it to load point and on-line.
 - b. Logon to SYSPROG and press RETURN to go to TCL.
 - c. Type:

SEL-RESTORE TERMDEF * and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE TERMDEF *
```

```
Account name on tape:
```

Type:

SYSPROG and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE TERMDEF *
```

```
Account name on tape: SYSPROG
```

```
File name:
```

Type:

TERMDEF and press RETURN.

Upgrading an Existing System

The selective-restore will begin.

When the selective-restore has completed, unload the File-Save tape and store it in a safe place.

19. Mount the SYS-GEN tape, and bring it to load point and on-line. Then log on to the SYSPROG account. At TCL, type:

UPG-REV and press RETURN.

A list of filenames will appear on your screen. Then the following message will appear.

If last file name displayed is 'DICT MD', Enter return
Else enter 'ABORT'

Press RETURN if the last filename displayed is DICT MD.

If the last filename displayed is not DICT MD, enter **ABORT**. You will return to TCL. Do not proceed. Call the Ultimate Support Group.

The following message will appear.

If last file name displayed is 'ULTINET MD', Enter return
Else enter 'END'

Press RETURN if the last filename displayed is ULTINET MD.

20. Restore your system Q-pointers. If you have any Q-pointers on your system, you must selectively-restore them from your file-save tape. System Q-pointers are normally stored at the end of the file-save, so if you have a multiple-reel file-save, the Q-pointers will be stored on the last reel. You must begin the sel-restore from reel 1 of your file-save. Then you will be instructed below to remove reel 1 and mount the last reel. Follow the steps below.

a. Mount reel #1 of your File-Save and bring it to load

Upgrading an Existing System

22. The upgrade is now complete. You may now logon and begin your normal work. Keep the File-Save from Step 1 from your previous release for future reference.

Diagnostics Monitor

3 FORMATTING A DISK DRIVE

The Diagnostics Monitor is run off-line. This means that you are not able to run your system in the normal mode. Only line zero is activated. The Ultimate Diagnostics Monitor has two modes of operation:

1. Formatting
2. Maintenance

This document will only discuss the option for formatting your disk (consult the Diagnostics Monitor Manual for more detailed information).

1. Make sure you've followed the Booting instructions in Section 5.
2. At the System Startup Options menu, enter D.

This will load the Diagnostics Monitor. The following screen will be displayed.

```
-----  
ST506 disc sub-system  
Format and disc diagnostic utility  
  
  (F)ormat a drive  
  (B)ad sector map read  
  (R)ead disc parameters (vtoc)  
  (W)rite disc parameters (vtoc)  
  (D)rive diagnostics menu  
  (S)ystem debugger module  
  (E)xit to options menu  
  
Select option:  
-----
```

Enter F

The following screen is displayed.

Diagnostics Monitor

```
ST506 disc sub-system
Format and disc diagnostic utility
```

```
(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu
```

Select option: F

Enter drive number (0-2)

Enter the number of the drive (0,1,or 2) that you want to format.

The following screen is displayed.

```
ST506 disc sub-system
Format and disc diagnostic utility
```

```
(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu
```

Select option: F

Enter drive number (0-2).. 0
Enter (Y)es to continue

Type Y to continue the formatting process. This will destroy all previous data on the disc.

Diagnostics Monitor

The following screen is displayed.

```
ST506 disc sub-system
Format and disc diagnostic utility
```

```
(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu
```

```
Select option: F
```

```
Enter drive number (0-2).. 0
Enter (Y)es to continue... Y
Use bad sector map (Y/N)
```

Enter:

Y to make sure previous bad tracks are marked defective
N if you don't want to save previously marked bad tracks

CAUTION: If you are formatting a new drive, you must enter **N** at this prompt. Then, at any time in the future when formatting the drive, you may enter **Y**.

The following screen is displayed.

Diagnostics Monitor

ST506 disc sub-system
Format and disc diagnostic utility

(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu

Select option: F

Enter drive number (0-2).. 0
Enter (Y)es to continue... Y
Use bad sector map (Y/N).. N

Verifying
cyl:xxxx trk:xx
Writing map
Writing VTOC

Once these messages have been displayed, then the formatting process is complete.

Booting the System

APPENDIX A: BOOTING THE SYSTEM

Throughout this manual, you will be asked to "boot" or "initialize the system." The following steps describe the procedure.

1. Make sure the AC PRESENT light is ON. (Refer to the POWERING ON instructions in Section 2.)
2. Load the Ultimate SYS-GEN tape. (Refer to the tape loading instructions in Section 4.)
3. If both the AC PRESENT and DC ON lights are on, press the RESET button. If only the AC PRESENT light is on, press the POWER ON button. The following screen will be displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iaagnostic Monitor
(F)ile Restore
(W)armstart

Enter Option:

-
4. Refer to Section 6 for information on each of the System Startup Options.

NOTE: If the system was :WARMSTOPPED prior to being powered off, refer to Section 6.7 to WARMSTART the system. If the system was not :WARMSTOPPED prior to being powered off, then refer to Section 6.2 to COLDSTART the system.

Booting the System

APPENDIX B: LIST OF ACCOUNTS ON THE SYS-GEN

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:)
    SYSTEM
    SYSTEM-ERRORS
    BLOCK-CONVERT
    SECURITY
    PROCLIB
    SYSLIB
    SYSTEM (Synonym)
    SYSPROG
    ERRMSG
    SPSYM
    GAMES
    TRAINING
    ACC
    SYSTEM (Q-pointers, etc.)
    T-DUMP of STAT-FILE
```

Several files are T-DUMPed at the end of the SYS-GEN tape. These files are used for the selective upgrade method, and for updating the WP, ATP, UTILINK, and ULTIMATION accounts. To position the tape at the first file, do 19 T-FWDs from load point. The files are dumped as follows.

```
SYSPROG MD          DOCUMENT,SYSTEM
DICT NEWAC          DICT UFOS
ERRMSG              UFOS
DICT SYSLIB         DICT REALLOC-FILE
SYSLIB              WP Master Dictionary
DICT TERMDEF        DICT WP-PROGS
TERMDEF             WP-PROGS, TABLES
CONVERSION, DOC     DICT SPSYM
CONVERSION, PGM     SPSYM
CONVERSION, PROC    SPSYM, DF
CONVERSION, TABLE account-save of WP
OSYM                account-save of ATP
PSYM                account-save of UTILINK
DICT STAT-FILE      account-save of ULTIMATION
DICT BLOCK-CONVERT ULTINET MD
USER-MODES          ULTINET BP
USER-MODES, SOURCE
DICT SYSPROG-PL
DICT ACC
DICT SYS-ERRS
DICT DOCUMENT
DOCUMENT
```

Booting the System

DOCUMENT, DELTA
DOCUMENT, UPG





ULT

THE ULTIMATE CORP.

717 RIDGEDALE AVENUE, EAST HANOVER, NEW JERSEY 07936

(201) 887-9222 TWX 710-996-5862 Telecopier (201) 887-6139

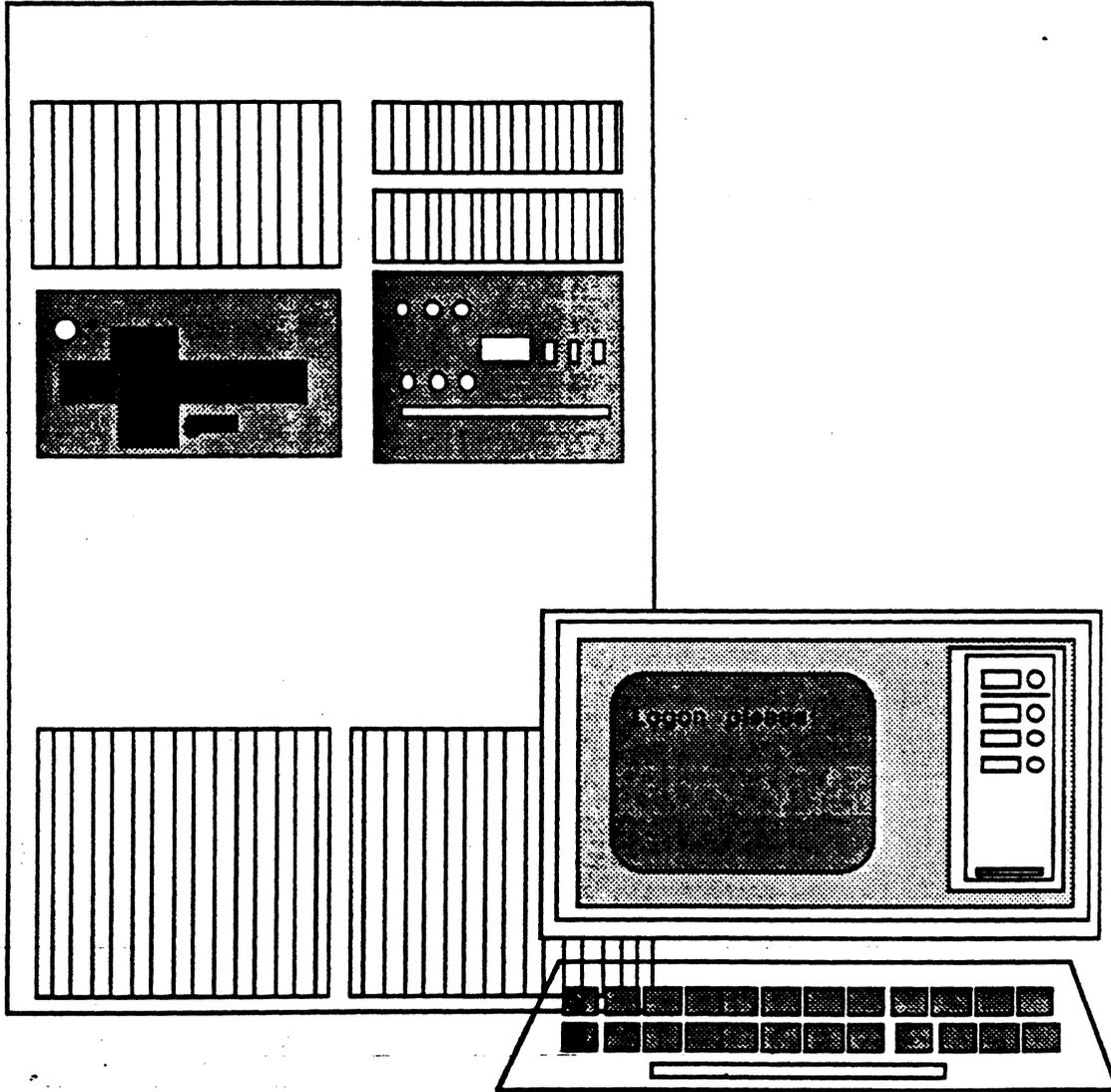
CONTAINS NEW UPGRADE INSTRUCTIONS!

1988-03

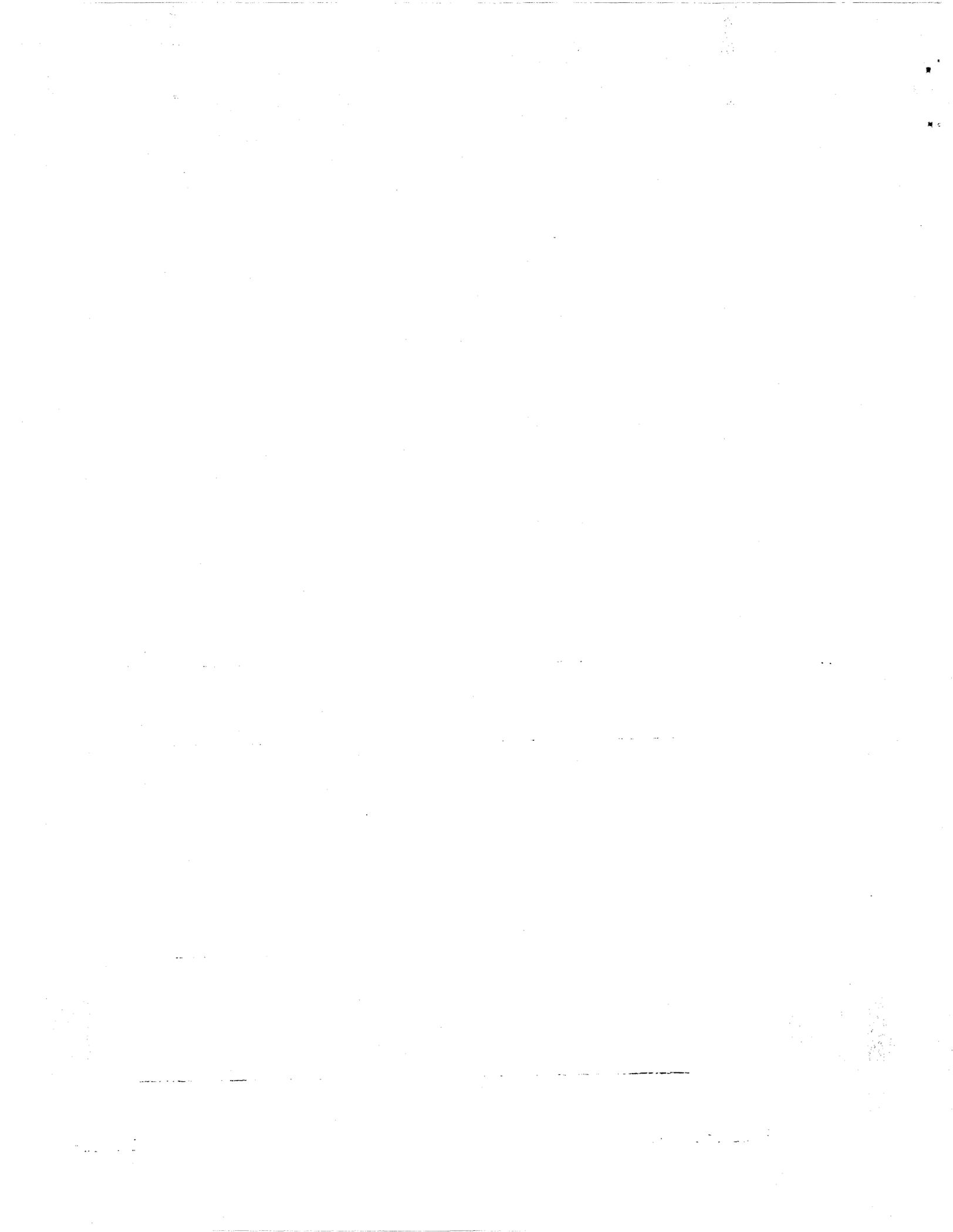
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Upgrade Procedures

1400 Series Systems



THE ULTIMATE CORP.



**1400 Series
Upgrade Procedures**

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HOW TO USE THIS MANUAL

The procedures in this document explain how to upgrade from your current Ultimate software to the latest software release. This document also includes instructions for installing Ultimate on a new system.

These procedures involve your SYS-GEN tape. The SYS-GEN is used to generate or reboot your Ultimate system.

Although the SYS-GEN tape can be used to generate or boot all Ultimate systems, this document is intended for Honeywell 1400 Series systems only. If you have any problems, contact Ultimate Technical Support at (201) 887-2721.

The following topics are discussed in this manual:

- Section 1 describes the procedure for **INSTALLING ULTIMATE ON A NEW SYSTEM**. This section should be followed if your Ultimate system is new, and does not contain any software.
- Section 2 describes three methods of **UPGRADING AN EXISTING SYSTEM**. Read the introduction to this section to determine which method you should use. Then follow the appropriate procedure.
- Section 3 explains the procedures for **FORMATTING A DISK DRIVE**.
- Appendix A contains instructions for **BOOTING THE SYSTEM**. Refer to these instructions whenever you are asked to "boot or initialize the system."
- Appendix B contains a **LIST OF ACCOUNTS ON THE SYS-GEN**. This list may help you locate a particular account.

The end of this document contains a Reader Comment Form and a Bug Report Form. If you find a problem or error in this guide or with the system software, 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.

1 INSTALLING ULTIMATE ON A NEW SYSTEM

Follow the instructions below to load the ULTIMATE system software onto your new system. These instructions can only be performed from the line zero terminal (console).

1. Begin by formatting your disk drive(s). First, you must Power On to the system.
 - A. Locate the main POWER switch on the back and turn to the ON position. If you have a dual-cabinet system, be sure to turn on both POWER switches.
 - B. Make sure the AC PRESENT light is lit.
2. Boot the system. If you are rebooting a system that is up and running, you must first do a :WARMSTOP from the SYSPROG account.
 - A. Load the Ultimate SYS-GEN tape. (Refer to the tape loading instructions in Section 4 of the Operations and Maintenance manual.)
 - B. If both the AC PRESENT and DC ON lights are on, press the RESET button. If only the AC PRESENT light is on, press the POWER ON button. The following screen is displayed.

This is the Ultimate Operating System

System Startup Options:

- (C)oldstart
- (D)iagnostic Monitor
- (F)ile Restore
- (W)armstart

Enter option:

- C. Refer to Section 6 of the 1400 Operations and Maintenance manual for information on each of the System Startup Options.

NOTE: *If the system was :WARMSTOPPED prior to being powered off, refer to Section 6.4 of the 1400 Operations and Maintenance manual to WARMSTART the system. If the system was not :WARMSTOPPED prior to being powered off, then refer to Section 6.1 to COLDSTART the system.*

3. If your disk(s) are new or have disk errors, format your disk(s). Otherwise, proceed to the next step. Section 3 of this manual explains formatting procedures.

Installing Ultimate on a New System

4. If you formatted your disk(s), boot the system. The previous screen is displayed.

If you did not format your disk, the previous screen should already be displayed.

At the prompt to select an option, type F.

This initiates a complete File-Restore. You will be doing a complete file-restore with the SYS-GEN tape only!

Information about your disc configuration is displayed. A sample screen is shown below.

```
Disc Configuration

chan set name # of
FF20 Ultimate 1400 1 1
L 2000# time date ABS ULT REL XX
Tape 0 attached Block size: 16384
```

In the next screen, you will be asked for your system serial number.

```
Tape 0 attached Block size: 16384

System serial # is presently

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

Enter your System Serial Number

For example, enter BV0000. If the correct serial number is shown, press RETURN to accept it.

The following screen is displayed.

Tape 0 attached Block size: 16384
System serial # is presently BVxxxx
Enter system serial # or <CR> to accept

Press RETURN if the number is correct.

You may reenter the correct number if you made a mistake. Press RETURN after you enter the correct number.

The following screen is displayed.

Tape 0 attached Block size: 16384
System serial # is presently BVxxxx
Enter system serial # or <CR> to accept
Mount ABS tape and enter number of files to skip, if any:

Installing Ultimate on a New System

Press RETURN.

Do not enter a number. (Your SYS-GEN tape should already be mounted.) The following screen is displayed.

```
System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN
```

WARNING: Do not mount your File-Save tape. Your SYS-GEN tape should already be mounted.

Press RETURN.

The following screen is displayed.

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN
L 2000# time date DATA SYS-GEN
Seq# of this data tape: 0 0 0 0
Is this the right tape (Y/N)?

Type **Y** and press RETURN.

The File-Restore will begin. Each file name on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

Update/transaction tapes (Y/N)?

Type **N** and press RETURN.

The following screen is displayed.

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0
```

```
date   time   Logon Please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright date The Ultimate Corp.   >>>
<<< time Release XX Rev XXX   date   >>>
```

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

Press RETURN.

The following screen is displayed.

```
date   time   Logon Please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright date The Ultimate Corp.   >>>
<<< time Release XX Rev XXX   date   >>>
```

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

```
Linking secondary TCL workspaces
```

```
X additional task workspaces initialized
```

```
time   date
```

```
Time =
```

Enter the time in military format (HH:MM:SS) and press RETURN.

For example, enter 5pm as 17:00:00. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time   date

Time = 17:00:00
17:00:00   date
Date =
```

Enter the date in the following format: MM/DD/YY and press RETURN.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time   date

Time = 17:00:00
17:00:00   date
Date = 02/03/86
17:00:00 03 FEB 1986
```

The system will display several messages. If there are any error messages (i.e.: System does not verify), call Ultimate Technical Support immediately.

The following screen is displayed.

Do You Wish to Start Parallel Printer 0 (<CR>=NO, Y=YES) ?

If you type Y to start a parallel printer, the following screen is displayed.

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.

date time Logon please:

If you press RETURN, the following screen is displayed.

date time Logon please:

5. Load the WP (UltiWord), UTILINK, ATP, and ULTIMATION accounts.

If Installing Revision 185Q or later

Logon to the SYSPROG account. Press RETURN at the SYSPROG Main Menu to display the TCL prompt. At the TCL prompt, type:

RESTORE-ALL-ULTIS and press RETURN.

In a few minutes, your UltiWord, UTILINK, ATP, and ULTIMATION accounts will be installed on your system. When this process is complete, the TCL prompt is displayed.

If Installing a Revision Prior to 185Q

- A. Logon to the SYSPROG account.
 - B. Mount your SYS-GEN tape. Make sure it is at load point and on-line.
 - C. From the SYSPROG main menu, select "Load WP account from SYS-GEN tape." The program will search for and load the WP account from the SYS-GEN tape.
 - D. When the WP account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load UTILINK account from SYS-GEN tape." The program will search for and load the UTILINK account from the SYS-GEN tape.
 - E. When the UTILINK account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ATP account from SYS-GEN tape." The program will search for and load the ATP account from the SYS-GEN tape.
 - F. When the ATP account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ULTIMATION account from SYS-GEN tape." The program will search for and load the ULTIMATION account from the SYS-GEN tape.
6. Create a duplicate SYS-GEN.

Ultimate recommends that you create one or more copies of the SYS-GEN for backup, in case your original SYS-GEN is missing or damaged.

- A. Remove the SYS-GEN, and mount a write-enabled blank tape to be used for the duplicate SYS-GEN.

- B. At TCL in the SYSPROG account, type:

SYS-GEN and press RETURN.

The duplicate copy of the SYS-GEN will be created. When the duplicate is complete, unload the duplicate SYS-GEN, label it, and store it in a safe place. Repeat Steps A and B to make as many copies of the SYS-GEN as you prefer.

7. You may now begin to load your application software.

2 UPGRADING AN EXISTING SYSTEM

Use one of the following three upgrade methods:

1. FILE-RESTORE FROM SYS-GEN TAPE METHOD
2. FILE-RESTORE FROM FILE-SAVE TAPE METHOD
3. SELECTIVE UPGRADE METHOD

You should only use this method if you are instructed to do so by Ultimate Technical Support.

| FROM RELEASE | TO RELEASE | USE METHOD |
|--------------------------------------|-------------------|---|
| any release other than a 185 release | any 185 release | 1 |
| 185A to 185R | Rev 185S or later | 1 or 2 (You will be instructed to format your disks using Rev 185S. Make sure you have a File-Save.) |

WARNING

User Exits should only be in frames 400 to 599. If you have User Exits in frames other than 400 to 599, they may cause problems during the upgrade.

2.1 METHOD 1: THE FILE-RESTORE FROM SYS-GEN TAPE METHOD

1. Do a complete File-Save of the system.

You will need the File-Save to restore your own accounts later in the upgrade. Follow the instructions in the Operations and Maintenance Guide to do a File-Save.

2. Now, you must check the File-Save tape to make sure there are no parity errors or bad spots on the tape.

This procedure involves doing a selective restore on an account and file that does not exist. This forces the system to read all of the tape(s), thereby checking the tape(s) for parity errors. Parity errors are signaled by percent (%) signs on your terminal.

- a. Mount tape #1 of your File-Save (or the tape you will use for backup). Make sure the tape is on-line.

- b. At TCL, type:

LOGTO SYSPROG and press RETURN.

Then press RETURN again to go to TCL. At TCL, type:

T-ATT n and press RETURN.

Replace "n" with the number of the tape drive on which the tape is mounted. Then, at TCL, type:

SEL-RESTORE SYSPROG-PL * and press RETURN.

You will be prompted:

Account name on tape?

Type a name that you know does not exist on the tape. For example, type TEST-ACCOUNT and press RETURN. Next, you will see the following prompt:

Filename on tape?

Again, type a name that does not exist on the tape. For example, type TEST-FILE and press RETURN.

Upgrading An Existing System

- c. The system will begin reading the tape for the account and file names you entered. Watch the terminal for % signs. If the tape is one of a multiple tape set, then you will be prompted to enter tape #2, then tape #3, etc., until all tapes have been mounted. Of course, the system will not find the account and file names so, when all tapes have been mounted, you will see the message:

0 items restored

If you see percent (%) signs on the terminal at any point during this procedure, then your tape(s) contains parity errors, and should not be used. Use another set of tapes to do a File-Save. Then try this test again. If the entire procedure runs without displaying percent (%) signs, then your tape(s) does not contain parity errors, and may be used to restore your data.

3. Make sure everyone is logged off the system. Then log on to the SYSPROG account. At TCL, enter:
:WARMSTOP and press RETURN.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the :WARMSTOP verb.

4. Mount the new SYS-GEN tape, and bring to load point.
5. Boot the system.
6. Format your disk(s). Section 3 of this manual explains formatting procedures.
7. Boot the system. The following screen will be displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iagnostics Monitor
(F)ile Restore
(W)armstart

Enter Option(s) or ? for help:

Type F

This initiates a complete File-Restore. You will be doing a complete file-restore with the SYS-GEN tape only!

Information about your disc configuration is displayed. A sample screen is shown following.

```
Disc Configuration

chan      set name      # of
FFxx ULTIMATE 1400    2 2

L 2000# time date ABS ULT REL XX *185 COLD LOAD FRAMES ~01
```

In the next screen, you will be asked for your system serial number.

```
Tape 0 attached Block size: 16384

System serial # is presently BVxxxx

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

Upgrading An Existing System

Enter your System Serial Number

For example, enter BV0000. If the correct serial number is shown, press RETURN to accept it. You may reenter the correct number if you made a mistake. Then press RETURN after you enter the correct number.

The following screen is displayed.

Tape 0 attached Block size: 16384

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

Press RETURN.

Do not enter a number. Your SYS-GEN tape should already be mounted. The following screen is displayed.

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

XX-XXX

XXXX-XXX

XXXX-XXX

XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN

WARNING: Do not mount your File-Save tape. (Your SYS-GEN tape should already be mounted.)

Press RETURN.

The following screen is displayed.

Mount DATA tape and press RETURN
L 2000# time date DATA SYS-GEN
Seq# of this data tape: 0 0 0 0
Is this the right tape (Y/N)?

Upgrading An Existing System

Type **Y** and press RETURN.

The File-Restore will begin. Each filename on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

Update/transaction tapes (Y/N)?

Type **N** and press RETURN.

The following screen is displayed.

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0

date    time  Logon Please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright date The Ultimate Corp.   >>>
<<< time Release XX Rev XXX date      >>>

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

Press RETURN.

The following screen is displayed.

date time Logon Please:

<<< Welcome to the Ultimate Computer System >>>

<<< Copyright date The Ultimate Corp. >>>

<<< time Release XX Rev XXX date >>>

This is the Cold-Start Procedure

Enter <CR> to continue

Linking secondary TCL workspaces

X additional task workspaces initialized

time date

Time =

Enter the time in military format (HH:MM:SS) and press RETURN.

For example, enter 5pm as 17:00:00. The following screen is displayed.

This is the Cold-Start Procedure

Enter <CR> to continue

Linking secondary TCL workspaces

X additional task workspaces initialized

time date

Time = 17:00:00

17:00:00 date

Date =

Upgrading An Existing System

Enter the date in the following format: MM/DD/YY and press RETURN.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time   date

Time = 17:00:00
17:00:00   date
Date = 02/03/86
17:00:00 03 FEB 1986
```

The system will display several messages. If there are any error messages (such as "System does not verify"), call Ultimate Technical Support immediately .

The following screen is displayed.

```
Do You Wish to Start Parallel Printer 0 (<CR>=NO, Y=YES) ?
```

If you type Y to start a parallel printer, the following screen is displayed.

```
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.  
  
date time Logon please:
```

If you press RETURN, the following screen is displayed.

```
date time Logon please:
```

8. Load the WP (UltiWord), UTILINK, ATP, and ULTIMATION accounts. These steps are necessary so that you may create a duplicate SYS-GEN, in Step 9 on the next page.

If Installing Revision 185Q or Later

Logon to the SYSPROG account. Press RETURN at the SYSPROG Main Menu to display the TCL prompt. At the TCL prompt, type:

RESTORE-ALL-ULTIS and press RETURN.

Upgrading An Existing System

In a few minutes, your UltiWord, UltiLink, ATP, and UltiMation accounts will be installed on your system. When this process is complete, the TCL prompt is displayed.

If Installing a Revision Prior to 185Q

- a. Logon to your SYSPROG account.
 - b. Mount your SYS-GEN tape. Make sure it is at load point and on-line.
 - c. From the SYSPROG main menu, select "Load WP account from SYS-GEN tape." The program will search for and load the WP account from the SYS-GEN tape.
 - d. When the WP account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load UTILINK account from SYS-GEN tape." The program will search for and load the UTILINK account from the SYS-GEN tape.
 - e. When the UTILINK account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ATP account from SYS-GEN tape." The program will search for and load the ATP account from the SYS-GEN tape.
 - f. When the ATP account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ULTIMATION account from SYS-GEN tape." The program will search for and load the ULTIMATION account from the SYS-GEN tape.
9. Create a duplicate SYS-GEN. Ultimate recommends that you create one or more copies for backup, in case your original SYS-GEN is missing or contains errors.
- a. Remove the SYS-GEN, and load a write-enabled blank tape (or spare formatted disk pack).
 - b. At TCL on the SYSPROG account, type:

SYS-GEN and press RETURN.

When the duplicate SYS-GEN is complete, unload the tape. Remove the duplicate SYS-GEN, label it, and store it in a safe place. Repeat this step to make as many copies as you prefer.

NOTE: Do not use your application programs until you complete the following steps.

10. If you were using UltiWord (the WP account), UTILINK, and ULTIMATION before the upgrade, then you must delete the WP, UTILINK, and ULTIMATION accounts you loaded in Step 8. The WP account you loaded in Step 8 does not contain your WP user names or documents. The UTILINK account you loaded in Step 8 does not contain system nodes definitions. And the ULTIMATION account you loaded in Step 8 does not contain your user codes and other setup information. You must use the DELETE-ACCOUNT command to delete the WP, UTILINK, and ULTIMATION accounts now. (See the System Commands Guide for instructions on using the DELETE-ACCOUNT command. This command must be issued from the SYSPROG account.) You will be instructed to restore your original WP, UTILINK, and ULTIMATION accounts in a later step. (Do not delete the ATP account.)

If you were not using WP, UTILINK, or ULTIMATION before the upgrade, you do not have to delete these three accounts now.

11. You are now ready to restore your own accounts.

a. Logon to the SYSPROG account and go to TCL.

b. If you are upgrading from Rev 123 or later, type:

T-ATT and press RETURN.

If you are upgrading from a release prior to Rev 123, type:

T-ATT (O and press RETURN.

This indicates that you are restoring from an "old" style tape.

c. Mount the first reel of your File-Save from Step 1. Bring it to load point and on-line.

There are two methods to use in restoring your accounts. These are by using either the ACCOUNT-RESTORE verb or the ALL-ACCOUNT-RESTORE verb. The ALL-ACCOUNT-RESTORE will not work if your FILE-SAVE was not made from the FILE-SAVE PROC supplied by The Ultimate Corp. If it was made from other sources, you must use the ACCOUNT-RESTORE verb.

If using the ALL-ACCOUNT-RESTORE method, proceed to Step d. If using the ACCOUNT-RESTORE method, proceed to Step e.

d. ALL-ACCOUNT-RESTORE method:

If installing Revision 185Q or later, type:

ALL-ACCOUNT-RESTORE and press RETURN.

If installing a Revision prior to 185Q, type:

RUN DICT SYSPROG-PL ALL-ACCOUNT-RESTORE

and press RETURN.

This program will restore all application accounts not already on the system, including the ULTIMATION account. When completed, go to Step 12. (Note that you cannot use update/transaction tapes with this method.)

e. ACCOUNT-RESTORE method:

Type:

ACCOUNT-RESTORE ACCOUNTNAME and press RETURN.

Upgrading An Existing System

Use this command to individually restore all application accounts not on the system. Follow this procedure for each account you are restoring. Make sure you use this procedure to restore the ULTIMATION, UTILINK, and WP accounts, if you were using them before the upgrade.

12. Make sure you are logged on to the SYSPROG account and at TCL.

13. Type:

RUN DICT SYSPROG-PL UPG.NEWAC and press RETURN.

This program will display names of all application accounts to be upgraded. When all names are displayed, you will then be prompted with:

(C)ontinue or (Q)uit?

Type C.

This program will upgrade the Master Dictionary of each application account displayed.

14. UltiWord Upgrade for Rev 110x, 120x, 121x, and 122x.

If UltiWord was not on your system before the upgrade, and you loaded it in Step 8, then go to Step 17.

If you were using WP prior to upgrading to this release, and you were:

Previously on Rev 110x, go to Step a.

Previously on Rev 120x, 121x, or 122x, logon to the WP account, go to TCL, and go to Step c.

Previously on Rev 123x, 124x, 125x, 130x, 135x, 140x, 150x, 160x, or 170x or later, go to Step 15.

a. Logon to the WP account and go to TCL.

b. Type:

CREATE-FILE DATA WP-PROGS, TABLES 3,1

and press RETURN.

c. Type:

CREATE-FILE DATA WP-PROGS, USER 31,1

and press RETURN.

d. Make sure the SYS-GEN is at load point and on-line.

e. Logon to the SYSPROG account and go to TCL.

f. Upgrade the UltiWord account.

If Installing Revision 185Q or Later

Type:

UPG-ULTIS and press RETURN.

This program upgrades the files in the new UltiWord, UltiMation, UltiNet, and UltiLink accounts.

If Installing a Revision Prior to 185Q

Type:

UPG-WP and press RETURN.

This program upgrades the files in the WP account.

g. Logon to WP.

The Conversion program will be called up automatically. The following screen is displayed.

DO YOU WANT TO CONTINUE WITH THE CONVERSION (Y/N):

Type Y

to initiate the conversion.

h. Go to Step 16.

15. UltiWord Upgrade for Rev 123x, 124x, 125x, 130x, 135x, 140x, 150x, 160x, 170x or later.

a. Make sure the SYS-GEN is at load point and on-line.

b. Make sure you are logged on to the SYSPROG account and at TCL.

c. Upgrade the WP account.

If Installing Revision 185Q or Later

Type:

UPG-ULTIS and press RETURN.

This program upgrades the files in the new UltiWord, UltiMation, UltiNet, and UltiLink accounts.

If Installing a Revision Prior to 185Q

Type:

UPG-WP and press RETURN.

This program upgrades the new WP account.

16. Enable WP in user accounts.

Logon to the WP account.

The Word Processor Main Menu is displayed, as shown following.

```
***** The Ultimate Corp. *****
***** WORD PROCESSING *****
***** Document Manager *****
      Main Menu

YOUR USER NAME:
DOCUMENT NAME:

(C)opy documents
(D)elete user
(E)dit/Enter
(L)ist
(N)ew
(P)rint
(S)et up user account
(U)tility
(V)iew
e(X)it

Enter option wanted:
```

Type S.

This selects the program to set up user accounts. The following screen is displayed.

```
***** The Ultimate Corp. *****  
***** WORD PROCESSING *****  
***** Document Manager *****  
Set up USER WP Menu
```

```
YOUR USER NAME:  
DOCUMENT NAME:
```

```
Enter name of account to set up or <EDIT>
```

Enter the user account name you wish upgraded, and press RETURN.

The following screen is displayed.

***** The Ultimate Corp. *****
***** WORD PROCESSING *****
***** Document Manager *****
Set up USER WP Menu

YOUR USER NAME: _
DOCUMENT NAME:

Enter name of account to set up or <EDIT>
The master dictionary of XXXX contains the following

These will be overwritten if Y is answered. (Y)es or <EDIT>

Type Y.

You will now be able to use WP from this account. The program will update all necessary verbs and Q-pointers for the Ultimate Word Processor. Repeat these steps for each account on which you have WP. When complete, go to Step 17.

NOTE: *If you get an error message such as "D/CC/CL Pointer Update Rejected," call Ultimate Technical Support.*

17. Upgrade your utilities.

If Installing Revision 185Q or Later

To upgrade the UltiMation, UltiLink, or UltiNet accounts, at TCL in the SYSPROG account, type:

UPG-ULTIS and press RETURN.

Then, load in any utilities of your own that you may store in the SYSPROG account.

Upgrading An Existing System

If Installing a Revision Prior to 185Q

Load in any utilities of your own that you may store in the SYSPROG account.

18. If you are upgrading from a release prior to Rev 130 or if you use the DICT ACC for Logon purposes (such as for setting the baud rate or terminal type), you will have to do a selective restore of the DICT ACC from your File-Save. Follow the steps below.

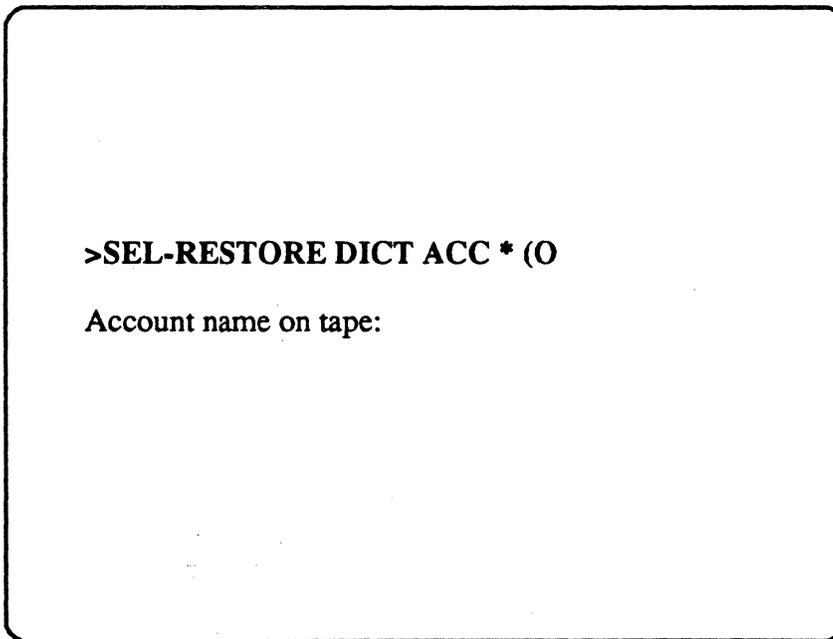
a. Mount your File-Save and bring it to load point.

b. Logon to SYSPROG and go to TCL.

c. Type:

SEL-RESTORE DICT ACC * (O and press RETURN.

The following screen is displayed.



Type:

ACC and press RETURN.

The following screen is displayed.

>SEL-RESTORE DICT ACC * (O

Account name on tape: ACC

File name:

Type:

DICT ACC and press RETURN.

The selective-restore will begin.

d. After the selective-restore has been completed, type:

RUN DICT SYSPROG-PL ACCCONV and press RETURN.

This program will convert all item IDs in the DICT ACC from a length of two to three.

19. If you store your own items in the TERMDEF file, then you must restore that file from your last file-save. Otherwise, the TERMDEF file will be recopied from the SYS-GEN, and the extra items you added to the file will not be present. Follow the steps below.

a. Mount your File-Save and bring it to load point and on-line.

b. Logon to SYSPROG and press RETURN to go to TCL.

c. Type:

SEL-RESTORE TERMDEF * and press RETURN.

The following screen is displayed.

>SEL-RESTORE TERMDEF *

Account name on tape:

Type:

SYSPROG and press RETURN.

The following screen is displayed.

>SEL-RESTORE TERMDEF *

Account name on tape: **SYSPROG**

File name:

Type:

TERMDEF and press RETURN.

The selective-restore will begin.

When the selective-restore has completed, unload the File Save tape and store it in a safe place.

If Installing Revision 1850 or later

In addition to restoring your TERMDEF file, type:

UPG-TERMDEF and press RETURN.

Then, proceed to Step 21.

20. Mount the SYS-GEN tape, and bring it to load point and on-line. Then log on to the SYSPROG account. At TCL, type:

UPG-REV and press RETURN.

A list of file names will appear on your screen. Then the following message will appear.

If last file name displayed is 'DICT MD', Enter return

Else enter 'ABORT'

Press RETURN if the last filename displayed is DICT MD.

If the last filename displayed is not DICT MD, enter ABORT. You will return to TCL. Do not proceed. Call Ultimate Technical Support.

21. Restore your system Q-pointers. If you have any Q-pointers on your system, you must selectively-restore them from your file-save tape. System Q-pointers are normally stored at the end of the file-save, so if you have a multiple-tape file-save, the Q-pointers will be stored on the last tape. You must begin the sel-restore from tape 1 of your file-save. Follow the steps below.

a. Mount tape #1 of your File-Save and bring it to load point and on-line.

b. Logon to SYSPROG and press RETURN to go to TCL.

c. Type:

SEL-RESTORE SYSTEM * (N) and press RETURN.

Upgrading An Existing System

The N option specifies that the file should be identified by its number, not by its name. The following screen is displayed.

>SEL-RESTORE SYSTEM * (N)

File #:

Type:

1 and press RETURN.

The selective-restore will begin. If you have a multiple-tape File-Save, when the first tape's selective restore is completed, you will be prompted to "Mount Next Reel." Mount the next tape at this time.

When the selective-restore is completed, unload the File Save tape(s), and store in a safe place.

22. Reload UltiCalc.

If you were using UltiCalc before the upgrade, you must re-install UltiCalc. To do so, log on to the ULTICALC account. At the UltiCalc menu, enter **I** to select "Install UltiCalc on the system."

If you were not using UltiCalc before the upgrade, then go on to Step 23.

23. The upgrade is now complete. You may now log on and begin your normal work. Keep the File-Save from Step 1 from your previous release for future reference.

END OF UPGRADE METHOD 1

2.2 METHOD 2: THE FILE-RESTORE FROM FILE-SAVE TAPE METHOD

You may use this method if you are upgrading from any 185 revision to Revision 185S or later.

NOTE: All users must be off the system until the upgrade is complete.

1. Do a complete File-Save of the system.

You will need the File-Save to restore your own accounts later in the upgrade. Follow the instructions in the Operations and Maintenance Guide to do a File-Save.

2. Now, you must check the File-Save tape(s) to make sure there are no parity errors or bad spots on the tape(s).

This procedure involves doing a selective restore on an account and file that does not exist. This forces the system to read all the tape(s), thereby checking the tape(s) for parity errors. Parity errors are signaled by percent (%) signs on your terminal.

- a. Mount Reel #1 of your File-Save tape (or the tape you will use for backup).
Make sure the tape is on-line.
- b. At TCL, type:

LOGTO SYSPROG and press RETURN.

Then press RETURN again to go to TCL. At TCL, type:

T-ATT n and press RETURN.

Replace "n" with the number of the tape drive on which the tape is mounted. Then, at TCL, type:

SEL-RESTORE SYSPROG-PL * and press RETURN.

You will be prompted:

Account name on tape?

Type a name that you know does not exist on the tape. For example, type TEST-ACCOUNT and press RETURN. Next, you will see the following prompt:

Filename on tape?

Again, type a name that does not exist on the tape. For example, type TEST-FILE and press RETURN.

Upgrading An Existing System

- c. The system will begin reading the tape for the account and file names you entered. Watch the terminal for % signs. If the tape is one reel of a multiple-reel set, then you will be prompted to enter Reel #2, then Reel #3, etc., until all reels have been mounted. Of course, the system will not find the account and file names, so when all reels have been mounted, you will see the message:

0 items restored

If you see percent (%) signs on the terminal at any point during this procedure, then your tape(s) contains parity errors, and should not be used. Use another set of tapes to do a File-Save. Then, try this test again. If the entire procedure runs without displaying percent (%) signs, then your tape(s) does not contain parity errors, and may be used to back up your data.

3. Make sure everyone is logged off the system. Then logto the SYSPROG account. At TCL, enter:

:WARMSTOP and press RETURN.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the :WARMSTOP verb.

4. Mount the SYS-GEN tape, and make sure it is loaded and on-line.
5. Initialize the system (see Appendix A for instructions). The following screen is displayed.

This is the Ultimate Operating System

System Startup Options:

- (C)oldstart
- (D)iagnostics Monitor
- (F)ile Restore
- (W)armstart

Enter Option(s) or ? for help:

6. Format your disk(s). Section 3 of this manual explains the formatting process.
7. Initialize the system (see instructions in Appendix C). The following screen is displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart

(D)iagnostics Monitor

(F)ile Restore

(W)armstart

Enter Option(s) or ? for help:

Enter F

This command starts a complete File-Restore.

Information about your disk configuration is displayed. A sample screen is shown below.

Disc Configuration

| chan | set name | # | of |
|------|----------|------|-----|
| FFxx | ULTIMATE | 1400 | 1 1 |

L 2000# time date ABS ULT REL XX *185 COLD LOAD FRAMES ~01

In the next screen, you are asked for your system serial number.

Tape 0 attached Block size: 16384
System serial # is presently BVxxxx
Enter system serial # or <CR> to accept

Enter your System Serial Number

For example, enter BV0000. If the correct serial number is shown, press RETURN to accept it. You may reenter the correct number if you made a mistake. Then press RETURN after you enter the correct number.

The following screen is displayed.

Tape 0 attached Block size: 16384
System serial # is presently BVxxxx
Enter system serial # or <CR> to accept
Mount ABS tape and enter number of files to skip, if any:

Press RETURN.

Do not enter a number. Your SYS-GEN tape should already be mounted. The following screen is displayed.

Tape 0 attached Block size: 16384
System serial # is presently BVxxxx
Enter system serial # or <CR> to accept
Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started
Mount DATA tape and press RETURN

Upgrading An Existing System

Type U.

You will see the message "Rewinding..." on your screen. When the SYS-GEN tape is finished rewinding, the green light on the tape drive will go out, and you will be prompted to "Mount DATA tape and press RETURN" again.

Unload the SYS-GEN tape. Then mount the first reel (or pack) of the File-Save tape (or disk), and make sure it is loaded and on-line.

Press RETURN.

If you have a multiple-reel File-Save, you will be prompted at the end of each reel to mount the next reel.

The following screen is displayed.

```
Mount DATA tape and press RETURN
L2000# time date DATA File-Save
Seq# of this data tape: 0 0 0 0
Is this the right tape (Y/N)?
```

Check the tape label displayed to verify that this is your most recent file-save tape (or disk). If it is the most recent file-save, enter **Y** and press RETURN.

The File-Restore will begin. Each filename on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

Update/transaction tapes (Y/N)?

Enter N and press RETURN.

The following screen is displayed.

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0

    date   time   Logon please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright   date   The Ultimate Corp.   >>>
<<<   time   Release XX   Rev XX   date   >>>

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

Press RETURN.

The following screen is displayed.

```
date time Logon Please:  
  
<<< Welcome to the Ultimate Computer System >>>  
<<< Copyright date The Ultimate Corp. >>>  
<<< time Release XX Rev XX date >>>  
  
This is the Cold-Start Procedure  
Enter <CR> to continue  
  
Linking secondary TCL workspaces  
  
X additional task workspaces initialized  
  
time date  
  
Time =
```

Enter the time in military format (HH:MM:SS) and press RETURN.

For example, enter 5pm as 17:00:00. The following screen is displayed.

```
This is the Cold-Start Procedure  
Enter <CR> to continue  
  
Linking secondary TCL workspaces  
  
X additional task workspaces initialized  
  
time date  
  
Time = 17:00:00  
17:00:00 date  
Date =
```

Enter the date in the following format: MM/DD/YY and press RETURN.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

      time    date
.....
Time = 17:00:00
17:00:00  date
Date = 02/03/86
17:00:00  03 Feb 1986
```

The system will display several messages. One error message, "Ultimate Operating System does not Verify," is to be expected at this time. The system will verify when the upgrade is complete.

The following screen will be displayed.

```
>> date    time    Logon please <<
```

Upgrading An Existing System

NOTE: Do not use your application programs until you complete the following steps.

8. Make sure you are logged on to the SYSPROG account and at TCL.
9. Mount the SYS-GEN, and make sure it is loaded and on-line. To rewind the tape to the beginning, type:
T-REW and press RETURN.
10. Upgrade the Master Dictionary of SYSPROG. Type:
T-SPACE 19 and press RETURN.

WARNING: *This command will skip 19 files on tape. The names of the files will be displayed on the screen. If the last file listed is not the "STAT-FILE," then type T-REW and press RETURN 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 Technical Support.*

11. Type:
T-LOAD MD (O,I) and press RETURN.
12. Upgrade files in the SYSPROG, WP, UTILINK, and ULTIMATION accounts.
 - a. Make sure the SYS-GEN is loaded and on-line.
 - b. Make sure you are logged on to the SYSPROG account and at TCL.
 - c. Type:
UPG-REV and press RETURN.

The words "END OF FILE" will appear several times on your screen. Then the following message is displayed.

If last file name displayed is 'DICT MD', Enter return
Else enter 'ABORT'

Press RETURN if the last filename displayed is "DICT MD."

If the last file name displayed is not "DICT MD," enter **ABORT**. You will return to TCL.
Do not proceed. Call Ultimate Technical Support.

Once you press RETURN, the program displays the names of all application accounts to be upgraded. At the prompt "(C)ontinue or (Q)uit?", type **C** to continue. The SYSPROG Main Menu will be displayed. Press RETURN to go to TCL.

13. Make sure you are logged on to the SYSPROG account and at TCL.
14. Upgrade your application accounts.

If Installing Revision 185Q or Later

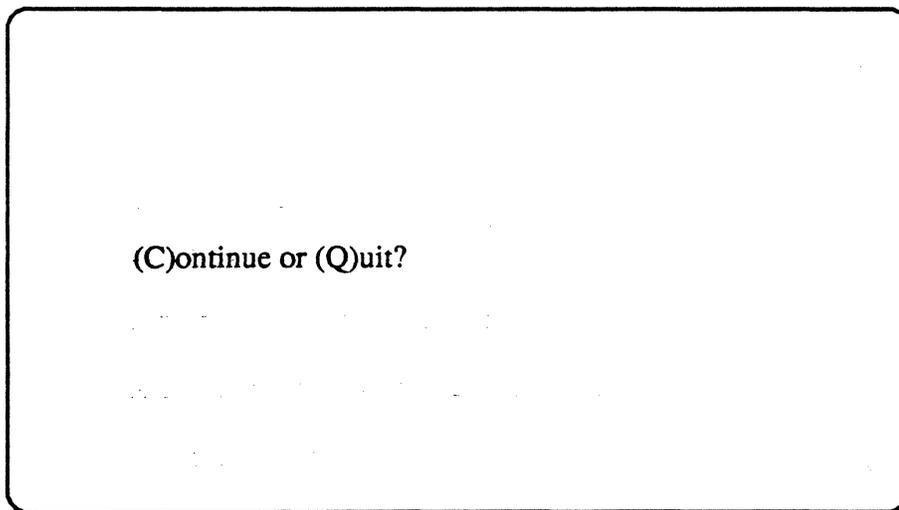
Proceed to Step 15.

If Installing a Revision Prior to 185Q

Type:

RUN DICT SYSPROG-PL UPG.NEWAC and press RETURN.

The program displays the names of all application accounts to be upgraded. The following message is displayed.



Enter **C** to continue.

The system will now upgrade the Master Dictionary of each user account displayed.

Upgrading An Existing System

15. Check to see if the system verifies. From the SYSPROG account, go to TCL.

Type:

VERIFY-SYSTEM and press RETURN.

The system should now verify. If you see a message indicating a mismatch, call Ultimate Technical Support.

16. Reload ULTICALC.

If you were using UltiCalc before the upgrade, you must re-install it. To do so, log on to the ULTICALC account. At the UltiCalc menu, enter I to select "Install UltiCalc on the system."

17. Create a Boot tape.

A boot tape contains only the programs needed to boot your system. A SYS-GEN contains the programs to boot your system, and it also contains system accounts and system files. Ultimate recommends that you create a boot tape now, and that you create a duplicate SYS-GEN at the time of your next File-Restore.

Follow the instructions in the System Commands Guide and the System Management and Support Guide to create a boot tape and a duplicate SYS-GEN tape.

18. The upgrade is now complete. You may log on and begin your normal work. Keep the file-save from Step 1 from your previous release for future reference.

END OF UPGRADE METHOD 2

2.3 METHOD 3: THE SELECTIVE UPGRADE METHOD

Do not use this method unless you are instructed to do so by Ultimate Technical Support.

NOTE: All users must be off the system until the upgrade is complete.

1. Make sure everyone is logged off the system. Do a complete File-Save of the system.

This step is important in ensuring that you will be able to recover your files in the event of a mishap during the upgrade. Ultimate strongly recommends that you take the time to do this now. Otherwise, you may spend hours trying to recover your files later, in the event of a problem.

2. Now, you must check the File-Save tape(s) to make sure there are no parity errors or bad spots on the tape(s).

This procedure involves doing a selective restore on an account and file that does not exist. This forces the system to read all the tape(s), thereby checking the tape(s) for parity errors. Parity errors are signaled by percent (%) signs on your terminal.

- a. Mount Reel #1 of your File-Save tape (or the tape you will use for backup).
Make sure the tape is on-line.
- b. At TCL, type:

LOGTO SYSPROG and press RETURN.

Then press RETURN again to go to TCL. At TCL, type:

T-ATT n and press RETURN.

Replace "n" with the number of the tape drive on which the tape is mounted. Then, at TCL, type:

SEL-RESTORE SYSPROG-PL * and press RETURN.

You will be prompted:

Account name on tape?

Type a name that you know does not exist on the tape. For example, type TEST-ACCOUNT and press RETURN. Next, you will see the following prompt:

Filename on tape?

Again, type a name that does not exist on the tape. For example, type TEST-FILE and press RETURN.

Upgrading An Existing System

- c. The system will begin reading the tape for the account and file names you entered. Watch the terminal for % signs. If the tape is one reel of a multiple-reel set, then you will be prompted to enter Reel #2, then Reel #3, etc., until all reels have been mounted. Of course, the system will not find the account and file names, so when all reels have been mounted, you will see the message:

0 items restored

If you see percent (%) signs on the terminal at any point during this procedure, then your tape(s) contains parity errors, and should not be used. Use another set of tapes to do a File-Save. Then, try this test again. If the entire procedure runs without displaying percent (%) signs, then your tape(s) does not contain parity errors, and may be used to restore your data.

3. Logon to the SYSPROG account and go to TCL. Type:

:WARMSTOP and press RETURN.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the :WARMSTOP verb.

4. Mount the SYS-GEN tape (or disk), and make sure it is loaded and online.
5. Initialize the system (see instructions in Appendix A). The following screen is displayed.

This is the Ultimate Operating System

System Startup Options:

- (C)oldstart
- (D)iagnostics Monitor
- (F)ile Restore
- (W)armstart

Enter Option(s) or ? for help:

Enter **C**

This option starts a Coldstart.

In the next screen, you are asked for your system serial number.

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Enter your System Serial Number

For example, enter BV0000. If the correct serial number is shown, press RETURN to accept it. You may reenter the correct number if you made a mistake. Then press RETURN after you enter the correct number.

The following screen is displayed.

Upgrading An Existing System

System serial # is presently BVxxxx
Enter system serial # or <CR> to accept
Mount ABS tape and enter number of files to skip, if any:

Press RETURN.

Do not enter a number. Your SYS-GEN tape should already be loaded. The following screen is displayed.

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright date The Ultimate Corp. >>>
<<< time Release XX Rev XX date >>>

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

Press RETURN.

The following screen is displayed.

```
date time Logon Please:  
  
<<< Welcome to the Ultimate Computer System >>>  
<<< Copyright date The Ultimate Corp. >>>  
<<< time Release XX Rev XXX date >>>  
  
This is the Cold-Start Procedure  
Enter <CR> to continue  
  
Linking secondary TCL workspaces  
  
X additional task workspaces initialized  
  
time date  
  
Time =
```

Enter the time in military format (HH:MM:SS) and press RETURN.

For example, enter 5pm as 17:00:00. The following screen is displayed.

```
This is the Cold-Start Procedure  
Enter <CR> to continue  
  
Linking secondary TCL workspaces  
  
X additional task workspaces initialized  
  
time date  
  
Time = 17:00:00  
17:00:00 date  
Date =
```

Upgrading An Existing System

Enter the date in the following format: MM/DD/YY and press RETURN.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

      time  date

Time = 17:00:00
17:00:00  date
Date = 02/03/86
17:00:00 03 FEB 1986
```

The system will display several messages. One error message, "Ultimate Operating System does not Verify," is to be expected at this time. The system will verify when the upgrade is complete.

The following screen will be displayed.

```
>> date time Logon please: <<
```

NOTE: Do not use your application programs until you complete the following steps.

6. Logon to the SYSPROG account and go to TCL.
7. Make sure the SYS-GEN is loaded and on-line. Type T-REW and press RETURN to rewind the tape to the beginning of the tape.
8. Type:
T-SPACE 19 and press RETURN.

WARNING: This command will skip 19 files on tape. The names of the files will be displayed on the screen. The last file skipped should be "STAT-FILE." If the last file is not "STAT-FILE," then type T-REW and press RETURN 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 Technical Support.

9. At TCL, type:
T-LOAD MD (O,I) and press RETURN.
10. Upgrade files in the SYSPROG, WP, UTILINK, and ULTIMATION accounts.
 - a. Make sure the SYS-GEN is loaded and on-line.
 - b. Make sure you are logged on to the SYSPROG account and at TCL.
 - c. Type:
UPG-REV and press RETURN.
 - d. The words "END OF FILE" will be listed several times on your screen. Then the following message is displayed.

If last file name displayed is 'DICT MD' Enter return
Else enter 'ABORT'

Upgrading An Existing System

Press RETURN if the last filename displayed is "DICT MD."

If the last file name displayed is not "DICT MD," enter ABORT. You will return to TCL.
Do not proceed. Call Ultimate Technical Support.

Once you press RETURN, the program displays the names of all application accounts to be upgraded. At the prompt "(C)ontinue or (Q)uit?", type C to continue. The SYSPROG Main Menu will be displayed. Press RETURN to go to TCL.

11. Upgrade your application accounts.

If Installing Revision 185Q or Later

Proceed to Step 12.

If Installing a Revision Prior to 185Q

At TCL, type:

RUN DICT SYSPROG-PL UPG.NEWAC and press RETURN.

The program displays the names of all application accounts to be upgraded. The following message is displayed.

(C)ontinue or (Q)uit?

Enter C to continue.

The system will now upgrade the Master Dictionary of each user account.

12. Check to see if the system verifies. From the SYSPROG account, go to TCL.

Type:

VERIFY-SYSTEM and press RETURN.

The system should now verify. If you see a message indicating a mismatch, call Ultimate Technical Support.

13. Remove the SYS-GEN tape from your system.
14. Create a Boot tape.

A boot tape contains only the programs needed to boot your system. A SYS-GEN contains the programs to boot your system, and it also contains system accounts and system files. Ultimate recommends that you create a boot tape now, and that you create a duplicate SYS-GEN at the time of your next File-Restore.

Follow the instructions in the System Commands Guide and the System Management and Support Guide to create a boot tape and a duplicate SYS-GEN tape.

15. The upgrade is now complete. You may log on and begin your normal work. Keep the file-save from Step 1 from your previous release for future reference.

Ultimate recommends that you do a file-save and full file-restore as soon as possible.

END OF UPGRADE METHOD 3

Enrollment - Estimated for Fiscal Year 2011 - 2012

Total Enrollment - 1,000

Page 1

Enrollment - Estimated for Fiscal Year 2011 - 2012

3 FORMATTING A DISK DRIVE

The Diagnostics Monitor is run off-line. This means that you are not able to run your system in the normal mode. Only line zero is activated. The Ultimate Diagnostics Monitor has two modes of operation:

1. Formatting
2. Diagnostics

This document will only discuss the option for formatting your disk (consult the Operations and Maintenance Guide for more detailed information).

3.1 FORMATTING A DISK DRIVE FOR 1410 SYSTEMS

Follow the instructions in this section if you are formatting a disk drive for 1410 systems. If you want to format a disk drive for a 1420 or 1430 system, refer to Section 3.2.

WARNING: *If you format a disk, you will destroy all data on that disk. If you wish to save the data, perform a File-Save first. If you upgrade to Revision 185S or later, you must format your disk drives.*

1. Make sure you followed the Booting instructions in Appendix A.
2. At the System Startup Options menu, type D.

This will load the Diagnostics Monitor. The following screen is displayed.

```
ST506 disc sub-system
Format and disc diagnostic utility

(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu

Select option:
```

Type F to select "Format a drive."

A screen similar to the following is displayed.

ST506 disc sub-system
Format and disc diagnostic utility

- (F)ormat a drive
- (B)ad sector map read
- (R)ead disc parameters (vtoc)
- (W)rite disc parameters (vtoc)
- (D)rive diagnostics menu
- (S)ystem debugger module
- (E)xit to options menu

Select option: **F**

Enter drive number (0-2)

Enter the number of the drive (0, 1, or 2) that you want to format.

The following screen is displayed.

ST506 disc sub-system
Format and disc diagnostic utility

- (F)ormat a drive
- (B)ad sector map read
- (R)ead disc parameters (vtoc)
- (W)rite disc parameters (vtoc)
- (D)rive diagnostics menu
- (S)ystem debugger module
- (E)xit to options menu

Select option: **F**

Enter drive number (0-2).. **0**

Enter (Y)es to continue

Type **Y** to continue the formatting process. This will destroy all previous data on the disc.

The following screen is displayed.

ST506 disc sub-system
Format and disc diagnostic utility

- (F)ormat a drive
- (B)ad sector map read
- (R)ead disc parameters (vtoc)
- (W)rite disc parameters (vtoc)
- (D)rive diagnostics menu
- (S)ystem debugger module
- (E)xit to options menu

Select option: **F**

Enter drive number (0-2).. **0**
Enter (Y)es to continue... **Y**
Use bad sector map (Y/N)

Enter:

- Y** to make sure previous bad tracks are marked defective
- N** if you don't want to save previously marked bad tracks

CAUTION: *If you are formatting a new drive, you must enter N at this prompt. Then, at any time in the future when formatting the drive, you should enter Y.*

The following screen is displayed.

ST506 disc sub-system
Format and disc diagnostic utility

(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu

Select option: F

Enter drive number (0-2).. 0
Enter (Y)es to continue... Y
Use bad sector map (Y/N).. N

Verifying
cyl:xxxx trk:xx
Writing map
Writing VTOC

Once these messages have been displayed, then the formatting process is complete. Make sure you format all drives on your system.

NOTE: *Several error messages may occur during the formatting process. This is to be expected. Most errors that appear will be relocated automatically. However, if the message "Unrecoverable disk error" appears, call Ultimate Technical Support.*

3.2 FORMATTING A DISK DRIVE FOR 1420 AND 1430 SYSTEMS

Follow the instructions in this section to format a disk drive for 1420 and 1430 systems.

WARNING: *If you format a disk, you will destroy all data on that disk. If you wish to save the data, perform a File-Save first. If you upgrade to Revision 185S or later, you must format your disk drives.*

1. Make sure you have followed the Booting instructions in Appendix A.
2. At the System Startup Options menu, type **D**.

This will load the Diagnostics Monitor. The following screen is displayed.

Diagnostic monitor menu

- (F)ormat utility menu
- (D)isc diagnostics menu
- (H)ardware configuration
- (B)inary save and restore
- (S)ystem debugger utility
- e(X)it to options menu

Select option:

Type **F** to select "Format utility menu."

The following screen is displayed.

Format utility menu (rev 3)

- (F)ormat disc (data erased)
- (S)how manufacturers defect log
- (E)nter manufacturers defect log
- (D)isplay defective sector log
- (R)elocate defective sector
- e(X)it to diagnostic monitor

Select option:

Type **F** to select "Format disc."

The following screen is displayed.

```
Format utility menu (rev 3)

(F)ormat disc (data erased)
(S)how manufacturers defect log
(E)nter manufacturers defect log
(D)isplay defective sector log
(R)elocate defective sector
e(X)it to diagnostic monitor

Select option: F

Enter drive number (0-5)
```

Enter the number of the drive (0, 1, 2, 3, 4, or 5) that you want to format.

The following screen is displayed.

```
Format utility menu (rev 3)

(F)ormat disc (data erased)
(S)how manufacturers defect log
(E)nter manufacturers defect log
(D)isplay defective sector log
(R)elocate defective sector
e(X)it to diagnostic monitor

Select option: F

Enter drive number (0-5) 0
Enter (Y)es to continue
```

Enter **Y** to continue the formatting process. This will destroy all previous data on the disc.

The following screen is displayed.

Format utility menu (rev 3)

(F)ormat disc (data erased)
(S)how manufacturers defect log
(E)nter manufacturers defect log
(D)isplay defective sector log
(R)elocate defective sector
e(X)it to diagnostic monitor

Select option: **F**

Enter drive number (0-5) **0**

Enter (Y)es to continue **Y**

Formatting...

cyl:xxx trk:xx

Verifying...

cyl:xxx trk:xx sec:xx

Once these messages have been displayed, then the formatting process is complete. Make sure you format all drives on your system.

NOTE: *Several error messages may occur during the formatting process. This is to be expected. Most errors that appear will be relocated automatically. However, if the message "Unrecoverable disk error" appears, call Ultimate Technical Support.*



APPENDIX A: BOOTING THE SYSTEM

Throughout this manual, you will be asked to "boot" or "initialize the system." The following steps describe the procedure.

1. Make sure the AC PRESENT light is ON. (Refer to the POWERING ON instructions in Section 2, of the 1400 Operations and Maintenance Manual.)
2. Load the Ultimate SYS-GEN tape. (Refer to the tape loading instructions in Section 4, of the 1400 Operations and Maintenance Manual.)
3. If both the AC PRESENT and DC ON lights are on, press the RESET button. If only the AC PRESENT light is on, press the POWER ON button. The following screen is displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iagnostic Monitor
(F)ile Restore
(W)armstart

Enter Option:

Refer to Section 6, of the 1400 Operations and Maintenance Manual for information on each of the System Startup Options.

NOTE: *If the system was :WARMSTOPPED prior to being powered off, refer to Section 6.4 of the 1400 Operations and Maintenance Manual to WARMSTART the system. If the system was not :WARMSTOPPED prior to being powered off, then refer to Section 6.1 of the 1400 Operations and Maintenance Manual to COLDSTART the system.*

APPENDIX B: LIST OF ACCOUNTS ON THE SYS-GEN

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):
 SYSTEM
 SYSTEM-ERRORS
 BLOCK-CONVERT
 SECURITY
 PROCLIB
 SYSLIB
 SYSTEM (Synonym)
 SYSPROG
 ERRMSG
 SPSYM
 GAMES
 TRAINING
 ACC
 SYSTEM (Q-pointers, etc.)
 T-DUMP of STAT-FILE

Several files are T-DUMPed at the end of the SYS-GEN tape. These files are used for the selective upgrade method, and for updating the WP, ATP, UTILINK, and ULTIMATION accounts. To position the tape at the first file, do 19 T-FWDs from load point. The files are dumped as follows.

| | | |
|------------------|--------------------|----------------------------|
| SYSPROG MD | M2.OSYM | WP Master Dictionary |
| DICT NEWAC | DICT STAT-FILE | DICT WP-PROGS |
| ERRMSG | DICT BLOCK-CONVERT | WP-PROGS, TABLES |
| DICT TERMDEF | USER-MODES | DICT SPSYM |
| TERMDEF | USER-MODES,SOURCE | SPSYM |
| CONVERSION,DOC | DICT SYSPROG-PL | SPSYM,DF |
| CONVERSION,PGM | DICT ACC | DICT OA.PROG |
| CONVERSION,PROC | DICT SYS-ERRS | OA.PROC |
| CONVERSION,TABLE | DICT DOCUMENT | ULTIMATION MD |
| OSYM | DOCUMENT | account-save of WP |
| PSYM | DOCUMENT,DELTA | account-save of ATP |
| OBJECT | DOCUMENT,UPG | account-save of UTILINK |
| M1.OSYM | DOCUMENT,SYSTEM | account-save of ULTIMATION |
| M2.PSYM | DICT REALLOC-FILE | |



Ultimate Technical Support Bug/Suggestion Form

Bug Key _____ Priority _____ Date Received _____

For Ultimate Use Only

Category Affected: Systems, Applications, Other _____

Release Affected _____ Date Submitted _____

Your System No. _____ Contact Name _____

Detailed Description

System Configuration (memory size, number of ports, types of terminals and printers, etc.)

Response/Status

Date _____

FROM:

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Fold and tape. Please do not staple.

Place
Stamp
Here

**THE ULTIMATE CORP.
717 Ridgedale Avenue
East Hanover, NJ 07936
Attn: Quality Assurance**

Fold and tape. Please do not staple.

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 of Manual: _____

Document No.: _____ Date: _____

Comments

FROM:

Name: _____ System Number: _____

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Fold and tape. Please do not staple.

Place
Stamp
Here

**THE ULTIMATE CORP.
717 Ridgedale Avenue
East Hanover, NJ 07936
Attn: Documentation Manager**

Fold and tape. Please do not staple.

ULT

THE ULTIMATE CORP.

717 RIDGEDALE AVENUE,
EAST HANOVER, NEW JERSEY 07936

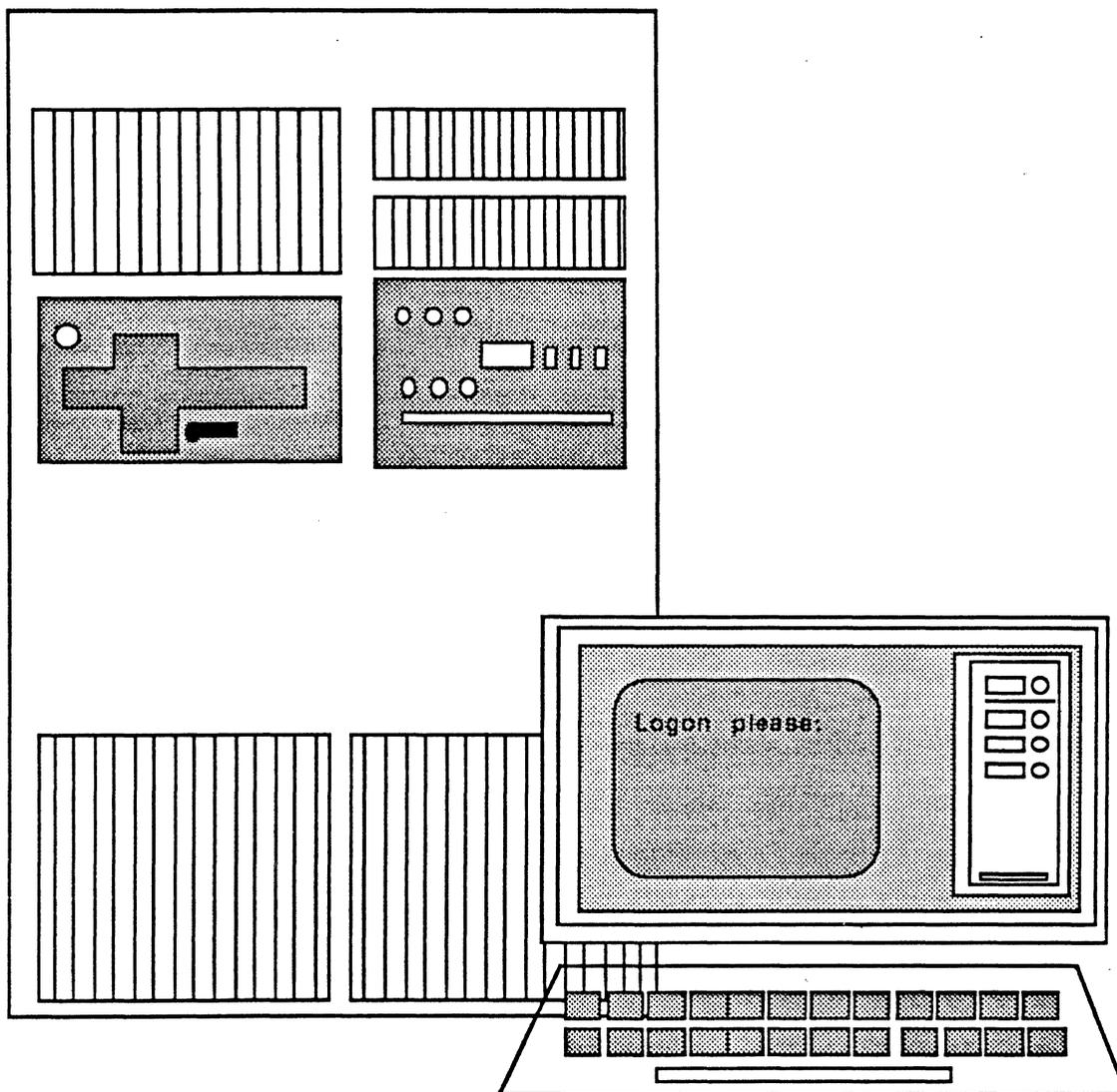
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CONTAINS NEW UPGRADE INSTRUCTIONS!

ULT

Upgrade Procedures

1400 Series Systems



THE ULTIMATE CORP.



1400 Series Upgrade Procedures

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Operating System Release 10, Revision 195
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Version 5.4



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HOW TO USE THIS MANUAL

The procedures in this document explain how to upgrade from your current Ultimate software to the latest software release. This document also includes instructions for installing Ultimate on a new system.

These procedures involve your SYS-GEN tape. The SYS-GEN is used to generate or reboot your Ultimate system.

Although the SYS-GEN tape can be used to generate or boot all Ultimate systems, this document is intended for Honeywell 1400 Series systems only. If you have any problems, contact Ultimate Technical Support at (201) 887-2721.

The following topics are discussed in this manual:

- Section 1 describes the procedure for **INSTALLING ULTIMATE ON A NEW SYSTEM**. This section should be followed if your Ultimate system is new, and does not contain any software.
- Section 2 describes three methods of **UPGRADING AN EXISTING SYSTEM**. Read the introduction to this section to determine which method you should use. Then follow the appropriate procedure.
- Section 3 explains the procedures for **FORMATTING A DISK DRIVE**.
- Appendix A contains instructions for **BOOTING THE SYSTEM**. Refer to these instructions whenever you are asked to "boot or initialize the system."
- Appendix B contains a **LIST OF ACCOUNTS ON THE SYS-GEN**. This list may help you locate a particular account.

The end of this document contains a Reader Comment Form and a Bug Report Form. If you find a problem or error in this guide or with the system software, 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.

1 INSTALLING ULTIMATE ON A NEW SYSTEM

Follow the instructions below to load the ULTIMATE system software onto your new system. These instructions can only be performed from the line zero terminal (console).

1. Begin by formatting your disk drive(s). First, you must power on the system.
 - A. Locate the main POWER switch on the back and turn to the ON position. If you have a dual-cabinet system, be sure to turn on both POWER switches.
 - B. Make sure the AC PRESENT light is lit.
2. Boot the system as instructed below.
 - A. Load the Ultimate SYS-GEN tape. (Refer to the tape loading instructions in Section 4 of the Operations and Maintenance manual.)
 - B. If both the AC PRESENT and DC ON lights are on, press the RESET button. If only the AC PRESENT light is on, press the POWER ON button. The following screen is displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iagnostic Monitor
(F)ile Restore
(W)armstart

Enter option:

- C. Refer to Section 6 of the 1400 Operations and Maintenance manual for information on each of the System Startup Options.
3. If your disk(s) are new or have disk errors, format your disk(s). Otherwise, proceed to the next step. Section 3 of this manual explains formatting procedures.

Installing Ultimate on a New System

4. If you formatted your disk(s), boot the system. The previous screen is displayed.

If you did not format your disk, the previous screen should already be displayed.

At the prompt to select an option, type F.

This initiates a complete File-Restore. You will be doing a complete file-restore with the SYS-GEN tape only!

Information about your disc configuration is displayed. A sample screen is shown below.

```
Disc Configuration

chan set name # of
FF20 Ultimate 1400 1 1
L 2000# time date ABS ULT REL XX
Tape 0 attached Block size: 16384
```

In the next screen, you will be asked for your system serial number.

```
Tape 0 attached Block size: 16384

System serial # is presently

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

Enter your System Serial Number

For example, enter BV0000. If the correct serial number is shown, press RETURN to accept it.

The following screen is displayed.

```
Tape 0 attached Block size: 16384

System serial # is presently BVxxxx

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

Press RETURN if the number is correct.

You may reenter the correct number if you made a mistake. Press RETURN after you enter the correct number.

The following screen is displayed.

```
Tape 0 attached Block size: 16384

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:
```

Installing Ultimate on a New System

Press RETURN.

Do not enter a number. (Your SYS-GEN tape should already be mounted.) The following screen is displayed.

```
System serial # is presently BVxxxx
Enter system serial # or <CR> to accept
Mount ABS tape and enter number of files to skip, if any:
XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN
```

WARNING: Do not mount your File-Save tape. Your SYS-GEN tape should already be mounted.

Press RETURN.

The following screen is displayed.

Mount ABS tape and enter number of files to skip, if any:

XX-XXX
XXXX-XXX
XXXX-XXX
XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN
L 2000# time date DATA SYS-GEN
Seq# of this data tape: 0 0 0 0
Is this the right tape (Y/N)?

Type **Y** and press RETURN.

The File-Restore will begin. Each file name on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

Update/transaction tapes (Y/N)?

Type **N** and press RETURN.

The following screen is displayed.

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0

date    time  Logon Please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright  date  The Ultimate Corp.    >>>
<<< time  Release XX Rev XXX  date    >>>

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

Press RETURN.

The following screen is displayed.

```
date    time  Logon Please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright  date  The Ultimate Corp.    >>>
<<< time  Release XX Rev XXX  date    >>>

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time    date

Time =
```

Enter the time in military format (HH:MM:SS) and press RETURN.

For example, enter 5pm as 17:00:00. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time   date

Time = 17:00:00
17:00:00   date
Date =
```

Enter the date in the following format: MM/DD/YY and press RETURN.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time   date

Time = 17:00:00
17:00:00   date
Date = 02/03/86
17:00:00 03 FEB 1986
```

The system will display several messages. If there are any error messages (i.e.: System does not verify), call Ultimate Technical Support immediately .

The following screen is displayed.

Do You Wish to Start Parallel Printer 0 (<CR>=NO, Y=YES) ?

If you type Y to start a parallel printer, the following screen is displayed.

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.

date time Logon please:

If you press RETURN, the following screen is displayed.

date time Logon please:

5. Load the WP (UltiWord), UTILINK, ATP, and ULTIMATION accounts.

If Installing Revision 185Q or later

Logon to the SYSPROG account. Press RETURN at the SYSPROG Main Menu to display the TCL prompt. At the TCL prompt, type:

RESTORE-ALL-ULTIS and press RETURN.

In a few minutes, your UltiWord, UTILINK, ATP, and ULTIMATION accounts will be installed on your system. When this process is complete, the TCL prompt is displayed.

If Installing a Revision Prior to 185Q

- A. Logon to the SYSPROG account.
 - B. Mount your SYS-GEN tape. Make sure it is at load point and on-line.
 - C. From the SYSPROG main menu, select "Load WP account from SYS-GEN tape." The program will search for and load the WP account from the SYS-GEN tape.
 - D. When the WP account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load UTILINK account from SYS-GEN tape." The program will search for and load the UTILINK account from the SYS-GEN tape.
 - E. When the UTILINK account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ATP account from SYS-GEN tape." The program will search for and load the ATP account from the SYS-GEN tape.
 - F. When the ATP account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ULTIMATION account from SYS-GEN tape." The program will search for and load the ULTIMATION account from the SYS-GEN tape.
6. Create a duplicate SYS-GEN.

Ultimate recommends that you create one or more copies of the SYS-GEN for backup, in case your original SYS-GEN is missing or damaged.

- A. Remove the SYS-GEN, and mount a write-enabled blank tape to be used for the duplicate SYS-GEN.
- B. At TCL in the SYSPROG account, type:

SYS-GEN and press RETURN.

The duplicate copy of the SYS-GEN will be created. When the duplicate is complete, unload the duplicate SYS-GEN, label it, and store it in a safe place. Repeat Steps A and B to make as many copies of the SYS-GEN as you prefer.

7. You may now begin to load your application software.

2 UPGRADING AN EXISTING SYSTEM

Use one of the following three upgrade methods:

1. FILE-RESTORE FROM SYS-GEN TAPE METHOD
2. FILE-RESTORE FROM FILE-SAVE TAPE METHOD
3. SELECTIVE UPGRADE METHOD

Only use the Selective Upgrade Method if you are instructed to do so by the Ultimate Technical Assistance Center (TAC).

| FROM RELEASE | TO RELEASE | USE METHOD |
|---------------------------|-----------------------------|--|
| any release prior to 195B | any 195 release | 1 |
| any release prior to 185 | any release | 1 |
| any 185 release | Revisions 185S through 186C | 1 or 2 (You will be instructed to format your disks. Make sure you have a File-Save.) |

NOTE: *If you use RPL or UltiCalc, make sure you have a new version of the SYSPROG-S account for RPL, and UltiCalc Version 3.1. (If not, call Ultimate's Administration dept. at 201-887-9222 to order them.)*

WARNING: *User Exits should only be in frames 400 to 599. If you have User Exits in frames other than 400 to 599, they may cause problems during the upgrade.*

2.1 METHOD 1: THE FILE-RESTORE FROM SYS-GEN TAPE METHOD

1. Do a complete File-Save of the system.

You will need the File-Save to restore your own accounts later in the upgrade. Follow the instructions in the Operations and Maintenance Guide to do a File-Save.

2. Now, you should check the File-Save tape to make sure there are no parity errors.

This procedure involves doing a selective restore on an account and file that does not exist. This forces the system to read all of the tape(s), thereby checking the tape(s) for parity errors. Parity errors are signaled by the message "Parity error! (A)cccept (R)etry (Q)uit."

- a. Mount tape #1 of your File-Save (or the tape you will use for backup). Make sure the tape is on-line.
- b. At TCL, type

LOGTO SYSPROG and press RETURN.

Then press RETURN again to go to TCL. At TCL, type

T-ATT *n* and press RETURN.

Replace *n* with the number of the tape drive on which the tape is mounted. Then, at TCL, type

SEL-RESTORE SYSPROG-PL * and press RETURN.

You will be prompted:

Account name on tape?

Type a name that you know does not exist on the tape. For example, type TEST-ACCOUNT and press RETURN. Next, you will see the following prompt:

Filename on tape?

Again, type a name that does not exist on the tape. For example, type TEST-FILE and press RETURN.

- c. The system will begin reading the tape for the account and file names you entered. If the tape is one of a multiple tape set, then you will be prompted to enter tape #2, then tape #3, etc., until all tapes have been mounted. Of course, the system will not find the account and file names so, when all tapes have been mounted, you will see the message:

0 items restored

If you see the message "Parity error! (A)cept (R)etry (Q)uit" on the terminal at any point during this procedure, then your tape(s) contains parity errors, and should not be used. Press Q to quit. Use another set of tapes to do a File-Save. Then try this test again. If the entire procedure runs without displaying the error message, then your tape(s) does not contain parity errors.

3. Make sure everyone is logged off the system. Then log on to the SYSPROG account. At TCL, type **:WARMSTOP** and press RETURN.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the **:WARMSTOP** verb.

4. Mount the new SYS-GEN tape, and bring to load point.
5. Boot the system.
6. Format your disk(s). Section 3 of this manual explains formatting procedures.
7. Boot the system. The following screen will be displayed.

This is the Ultimate Operating System

System Startup Options:

- (C)oldstart
- (D)iagnostics Monitor
- (F)ile Restore
- (W)armstart

Enter Option(s) or ? for help:

Type F

This initiates a complete File-Restore. You will be doing a complete file-restore with the SYS-GEN tape only!

Information about your disc configuration is displayed. A sample screen is shown following.

```
Disc Configuration

chan      set name      # of
FFxx  ULTIMATE 1400    2 2

L 2000# time date ABS ULT REL XX *185 COLD LOAD FRAMES ~01
```

In the next screen, you will be asked for your system serial number.

```
Tape 0 attached Block size: 16384

System serial # is presently BVxxxx

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

Upgrading An Existing System

Enter your System Serial Number

For example, enter BV0000. If the correct serial number is shown, press RETURN to accept it. You may reenter the correct number if you made a mistake. Then press RETURN after you enter the correct number.

The following screen is displayed.

Tape 0 attached Block size: 16384

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

Press RETURN.

Do not enter a number. Your SYS-GEN tape should already be mounted. The following screen is displayed.

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

XX-XXX

XXXX-XXX

XXXX-XXX

XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN

WARNING: Do not mount your File-Save tape. (Your SYS-GEN tape should already be mounted.)

Press RETURN.

The following screen is displayed.

Mount DATA tape and press RETURN
L 2000# time date DATA SYS-GEN
Seq# of this data tape: 0 0 0 0
Is this the right tape (Y/N)?

Upgrading An Existing System

Type **Y** and press RETURN.

The File-Restore will begin. Each filename on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

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

Type **N** and press RETURN.

The following screen is displayed.

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0

date   time  Logon Please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright  date  The Ultimate Corp.   >>>
<<< time  Release XX  Rev XXX  date   >>>

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

Press RETURN.

The following screen is displayed.

date time Logon Please:

<<< Welcome to the Ultimate Computer System >>>
<<< Copyright date The Ultimate Corp. >>>
<<< time Release XX Rev XXX date >>>

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time date

Time =

Enter the time in military format (HH:MM:SS) and press RETURN.

For example, enter 5pm as 17:00:00. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time date

Time = 17:00:00

17:00:00 date

Date =

Upgrading An Existing System

Enter the date in the following format: MM/DD/YY and press RETURN.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

time    date

Time = 17:00:00
17:00:00  date
Date = 02/03/86
17:00:00  03 FEB 1986
```

The system will display several messages. If there are any error messages (such as "System does not verify"), call Ultimate Technical Support immediately .

The following screen is displayed.

```
<<<Verifying software>>>
System software verified

Do You Wish to Start Parallel Printer 0 (<CR>=NO, Y=YES) ?
```

If you have a parallel printer, type **Y**. If you do not have a parallel printer, just press RETURN. The following screen is displayed.

```
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.

date time Logon please:
```

You may now log on to the system. If you did not start a parallel printer, the following screen is displayed.

```
date time Logon please:
```

8. Load the WP (UltiWord), ULTILINK, ATP, and ULTIMATION accounts. These steps are necessary so that you may create a duplicate SYS-GEN, in Step 9 on the next page.

If Installing Revision 185Q or Later

Logon to the SYSPROG account. Press RETURN at the SYSPROG Main Menu to display the TCL prompt. At the TCL prompt, type:

RESTORE-ALL-ULTIS and press RETURN.

Upgrading An Existing System

In a few minutes, your UltiWord, UltiLink, ATP, and UltiMation accounts will be installed on your system. When this process is complete, the TCL prompt is displayed.

If Installing a Revision Prior to 185Q

- a. Logon to your SYSPROG account.
 - b. Mount your SYS-GEN tape. Make sure it is at load point and on-line.
 - c. From the SYSPROG main menu, select "Load WP account from SYS-GEN tape." The program will search for and load the WP account from the SYS-GEN tape.
 - d. When the WP account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load UTILINK account from SYS-GEN tape." The program will search for and load the UTILINK account from the SYS-GEN tape.
 - e. When the UTILINK account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ATP account from SYS-GEN tape." The program will search for and load the ATP account from the SYS-GEN tape.
 - f. When the ATP account has been loaded, press RETURN to go back to the SYSPROG main menu. From the menu, select "Load ULTIMATION account from SYS-GEN tape." The program will search for and load the ULTIMATION account from the SYS-GEN tape.
9. Create a duplicate SYS-GEN. Ultimate recommends that you create one or more copies for backup, in case your original SYS-GEN is missing or contains errors.
- a. Remove the SYS-GEN, and load a write-enabled blank tape (or spare formatted disk pack).
 - b. At TCL on the SYSPROG account, type:

SYS-GEN and press RETURN.

When the duplicate SYS-GEN is complete, unload the tape. Remove the duplicate SYS-GEN, label it, and store it in a safe place. Repeat this step to make as many copies as you prefer.

NOTE: Do not use your application programs until you complete the following steps.

10. You are now ready to restore your own accounts.
- a. Logon to the SYSPROG account and go to TCL.
 - b. If you are upgrading from Rev 123 or later, type:

T-ATT and press RETURN.

If you are upgrading from a release prior to Rev 123, type:

T-ATT (O and press RETURN.

This indicates that you are restoring from an "old" style tape.

- c. Mount the first reel of your File-Save from Step 1. Bring it to load point and on-line.

There are two methods to use in restoring your accounts. These are by using either the ACCOUNT-RESTORE verb or the ALL-ACCOUNT-RESTORE verb. The ALL-ACCOUNT-RESTORE will not work if your FILE-SAVE was not made from the FILE-SAVE PROC supplied by The Ultimate Corp. If it was made from other sources, you must use the ACCOUNT-RESTORE verb.

If using the ALL-ACCOUNT-RESTORE method, proceed to Step d. If using the ACCOUNT-RESTORE method, proceed to Step e.

- d. ALL-ACCOUNT-RESTORE method:

If installing Revision 185Q or later, type:

ALL-ACCOUNT-RESTORE and press RETURN.

If installing a Revision prior to 185Q, type:

RUN DICT SYSPROG-PL ALL-ACCOUNT-RESTORE

and press RETURN.

This program will restore all application accounts not already on the system, including the ULTIMATION account. When completed, go to Step 11. (Note that you cannot use update/transaction tapes with this method.)

- e. ACCOUNT-RESTORE method:

Type:

ACCOUNT-RESTORE ACCOUNTNAME and press RETURN.

Use this command to individually restore all application accounts not on the system. Follow this procedure for each account you are restoring. Make sure you use this procedure to restore the ULTIMATION, UTILINK, and WP accounts, if you were using them before the upgrade.

11. Make sure you are logged on to the SYSPROG account and at TCL.

12. Type:

RUN DICT SYSPROG-PL UPG.NEWAC and press RETURN.

This program will display names of all application accounts to be upgraded. When all names are displayed, you will then be prompted with:

(C)ontinue or (Q)uit?

Type C.

This program will upgrade the Master Dictionary of each application account displayed.

13. UltiWord Upgrade for Rev 110x, 120x, 121x, and 122x.

If UltiWord was not on your system before the upgrade, and you loaded it in Step 8, then go to Step 16.

If you were using WP prior to upgrading to this release, and you were:

Previously on Rev 110x, go to Step a.

Previously on Rev 120x, 121x, or 122x, logon to the WP account, go to TCL, and go to Step c.

Previously on Rev 123x, 124x, 125x, 130x, 135x, 140x, 150x, 160x, or 170x or later, go to Step 14.

a. Logon to the WP account and go to TCL.

b. Type:

CREATE-FILE DATA WP-PROGS, TABLES 3,1

and press RETURN.

c. Type:

CREATE-FILE DATA WP-PROGS, USER 31,1

and press RETURN.

d. Make sure the SYS-GEN is at load point and on-line.

e. Logon to the SYSPROG account and go to TCL.

f. Upgrade the UltiWord account.

If Installing Revision 185Q or Later

Type:

UPG-ULTIS and press RETURN.

This program upgrades the files in the new UltiWord, UltiMation, UltiNet, and UltiLink accounts.

If Installing a Revision Prior to 185Q

Type:

UPG-WP and press RETURN.

This program upgrades the files in the WP account.

g. Logon to WP.

The Conversion program will be called up automatically. The following screen is displayed.

DO YOU WANT TO CONTINUE WITH THE CONVERSION (Y/N):

Type Y

to initiate the conversion.

h. Go to Step 15.

14. UltiWord Upgrade for Rev 123x, 124x, 125x, 130x, 135x, 140x, 150x, 160x, 170x or later.

a. Make sure the SYS-GEN is at load point and on-line.

b. Make sure you are logged on to the SYSPROG account and at TCL.

c. Upgrade the WP account.

If Installing Revision 185Q or Later

Type:

UPG-ULTIS and press RETURN.

This program upgrades the files in the new UltiWord, UltiMation, UltiNet, and UltiLink accounts.

If Installing a Revision Prior to 185Q

Type:

UPG-WP and press RETURN.

This program upgrades the new WP account.

15. Enable WP in user accounts.

Logon to the WP account.

The Word Processor Main Menu is displayed, as shown following.

```
***** The Ultimate Corp. *****
***** WORD PROCESSING *****
***** Document Manager *****
Main Menu
```

```
YOUR USER NAME:
DOCUMENT NAME:
```

```
(C)opy documents
(D)elete user
(E)dit/Enter
(L)ist
(N)ew
(P)rint
(S)et up user account
(U)tility
(V)iew
e(X)it
```

```
Enter option wanted:
```

Type S.

This selects the program to set up user accounts. The following screen is displayed.

```
***** The Ultimate Corp. *****  
***** WORD PROCESSING *****  
***** Document Manager *****  
Set up USER WP Menu
```

```
YOUR USER NAME:  
DOCUMENT NAME:
```

```
Enter name of account to set up or <EDIT>
```

Enter the user account name you wish upgraded, and press RETURN.

The following screen is displayed.

```
***** The Ultimate Corp. *****  
***** WORD PROCESSING *****  
***** Document Manager *****  
Set up USER WP Menu
```

```
YOUR USER NAME: _  
DOCUMENT NAME:
```

```
Enter name of account to set up or <EDIT>  
The master dictionary of XXXX contains the following
```

```
These will be overwritten if Y is answered. (Y)es or <EDIT>
```

Type Y.

You will now be able to use WP from this account. The program will update all necessary verbs and Q-pointers for the Ultimate Word Processor. Repeat these steps for each account on which you have WP. When complete, go to Step 16.

NOTE: If you get an error message such as "D/CC/CL Pointer Update Rejected," call Ultimate Technical Support.

16. Make sure your SYS-GEN tape is loaded and on-line. Upgrade your utilities.

If Installing Revision 185Q or Later

To upgrade the UltiMation, UltiLink, or UltiNet accounts, at TCL in the SYSPROG account, type:

UPG-ULTIS and press RETURN.

Then, load in any utilities of your own that you may store in the SYSPROG account.

Upgrading An Existing System

If Installing a Revision Prior to 185Q

Load in any utilities of your own that you may store in the SYSPROG account.

17. If you are upgrading from a release prior to Rev 130 or if you use the DICT ACC for Logon purposes (such as for setting the baud rate or terminal type), you will have to do a selective restore of the DICT ACC from your File-Save. Follow the steps below.

a. Mount your File-Save and bring it to load point.

b. Logon to SYSPROG and go to TCL.

c. Type:

SEL-RESTORE DICT ACC * (O and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE DICT ACC * (O
Account name on tape:
```

Type:

ACC and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE DICT ACC * (O
```

```
Account name on tape: ACC
```

```
File name:
```

Type:

DICT ACC and press RETURN.

The selective-restore will begin.

d. After the selective-restore has been completed, type:

RUN DICT SYSPROG-PL ACCCONV and press RETURN.

This program will convert all item IDs in the DICT ACC from a length of two to three.

18. If you store your own items in the TERMDEF file, then you must restore that file from your last file-save. Otherwise, the TERMDEF file will be recopied from the SYS-GEN, and the extra items you added to the file will not be present. Follow the steps below.

a. Mount your File-Save and bring it to load point and on-line.

b. Logon to SYSPROG and press RETURN to go to TCL.

c. Type:

SEL-RESTORE TERMDEF * and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE TERMDEF *
```

```
Account name on tape:
```

Type:

SYSPROG and press RETURN.

The following screen is displayed.

```
>SEL-RESTORE TERMDEF *
```

```
Account name on tape: SYSPROG
```

```
File name:
```

Type:

TERMDEF and press RETURN.

The selective-restore will begin.

When the selective-restore has completed, unload the File Save tape and store it in a safe place.

If Installing Revision 185Q or later

In addition to restoring your TERMDEF file, type:

UPG-TERMDEF and press RETURN.

Then, proceed to Step 20.

19. Mount the SYS-GEN tape, and bring it to load point and on-line. Then log on to the SYSPROG account. At TCL, type:

UPG-REV and press RETURN.

A list of file names will appear on your screen. Then the following message will appear.

If last file name displayed is 'DICT MD', Enter return

Else enter 'ABORT'

Press RETURN if the last filename displayed is DICT MD.

If the last filename displayed is not DICT MD, enter ABORT. You will return to TCL. Do not proceed. Call Ultimate Technical Support.

20. Restore your system Q-pointers. If you have any Q-pointers on your system, you must selectively-restore them from your file-save tape. System Q-pointers are normally stored at the end of the file-save, so if you have a multiple-tape file-save, the Q-pointers will be stored on the last tape. You must begin the sel-restore from tape 1 of your file-save. Follow the steps below.
- a. Mount tape #1 of your File-Save and bring it to load point and on-line.
 - b. Logon to SYSPROG and press RETURN to go to TCL.
 - c. Type:

SEL-RESTORE SYSTEM * (N) and press RETURN.

Upgrading An Existing System

The N option specifies that the file should be identified by its number, not by its name. The following screen is displayed.

```
>SEL-RESTORE SYSTEM * (N)

File #:
```

Type:

1 and press RETURN.

The selective-restore will begin. If you have a multiple-tape File-Save, when the first tape's selective restore is completed, you will be prompted to "Mount Next Reel." Mount the next tape at this time.

When the selective-restore is completed, unload the File Save tape(s), and store in a safe place.

21. Reload UltiCalc.

If you were using UltiCalc before the upgrade, you must re-install UltiCalc. To do so, log on to the ULTICALC account. At the UltiCalc menu, enter **I** to select "Install UltiCalc on the system."

If you were not using UltiCalc before the upgrade, then go on to Step 22.

22. The upgrade is now complete. You may now log on and begin your normal work. Keep the File-Save from Step 1 from your previous release for future reference.

END OF UPGRADE METHOD 1

2.2 METHOD 2: THE FILE-RESTORE FROM FILE-SAVE TAPE METHOD

You may use this method if you are upgrading from any 185 revision to Revision 185S or later.

NOTE: All users must be off the system until the upgrade is complete.

1. Do a complete File-Save of the system.

You will need the File-Save to restore your own accounts later in the upgrade. Follow the instructions in the Operations and Maintenance Guide to do a File-Save.

2. Now, you should check the File-Save tape(s) to make sure there are no parity errors.

This procedure involves doing a selective restore on an account and file that does not exist. This forces the system to read all the tape(s), thereby checking the tape(s) for parity errors. Parity errors are signaled by the message "Parity error! (A)cept (R)etry (Q)uit."

- a. Mount Reel #1 of your File-Save tape (or the tape you will use for backup).
Make sure the tape is on-line.
- b. At TCL, type

LOGTO SYSPROG and press RETURN.

Then press RETURN again to go to TCL. At TCL, type

T-ATT *n* and press RETURN.

Replace *n* with the number of the tape drive on which the tape is mounted. Then, at TCL, type

SEL-RESTORE SYSPROG-PL `*` and press RETURN.

You will be prompted:

Account name on tape?

Type a name that you know does not exist on the tape. For example, type TEST-ACCOUNT and press RETURN. Next, you will see the following prompt:

Filename on tape?

Again, type a name that does not exist on the tape. For example, type TEST-FILE and press RETURN.

Upgrading An Existing System

- c. The system will begin reading the tape for the account and file names you entered. If the tape is one reel of a multiple-reel set, then you will be prompted to enter Reel #2, then Reel #3, etc., until all reels have been mounted. Of course, the system will not find the account and file names, so when all reels have been mounted, you will see the message:

0 items restored

If you see the message "Parity error! (A)cccept (R)etry (Q)uit" on the terminal at any point during this procedure, then your tape(s) contains parity errors, and should not be used. Press Q to quit. Use another set of tapes to do a File-Save. Then, try this test again. If the entire procedure runs without displaying the message, then your tape(s) does not contain parity errors.

3. Make sure everyone is logged off the system. Then logto the SYSPROG account. At TCL, type

:WARMSTOP and press RETURN.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the :WARMSTOP verb.

4. Mount the SYS-GEN tape, and make sure it is loaded and on-line.
5. Initialize the system (see Appendix A for instructions). The following screen is displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iagnostics Monitor
(F)ile Restore
(W)armstart

Enter Option(s) or ? for help:

6. Format your disk(s). Section 3 of this manual explains the formatting process.
7. Initialize the system (see instructions in Appendix A). The following screen is displayed.

```
This is the Ultimate Operating System

System Startup Options:
(C)oldstart
(D)iagnostics Monitor
(F)ile Restore
(W)armstart

Enter Option(s) or ? for help:
```

Enter F

This command starts a complete File-Restore.

Information about your disk configuration is displayed. A sample screen is shown below.

```
Disc Configuration

chan  set name      # of
FFxx  ULTIMATE 1400  1  1

L 2000# time  date  ABS ULT REL XX *185 COLD LOAD FRAMES ~01
```

In the next screen, you are asked for your system serial number.

Tape 0 attached Block size: 16384
System serial # is presently BVxxxx
Enter system serial # or <CR> to accept

Enter your System Serial Number

For example, enter BV0000. If the correct serial number is shown, press RETURN to accept it. You may reenter the correct number if you made a mistake. Then press RETURN after you enter the correct number.

The following screen is displayed.

Tape 0 attached Block size: 16384
System serial # is presently BVxxxx
Enter system serial # or <CR> to accept
Mount ABS tape and enter number of files to skip, if any:

Press RETURN.

Do not enter a number. Your SYS-GEN tape should already be mounted. The following screen is displayed.

Tape 0 attached Block size: 16384

System serial # is presently BVxxxx

Enter system serial # or <CR> to accept

Mount ABS tape and enter number of files to skip, if any:

XX-XXX

XXXX-XXX

XXXX-XXX

XXXX-XXXX

Spooler started

Mount DATA tape and press RETURN

Type U.

You will see the message "Rewinding..." on your screen. When the SYS-GEN tape is finished rewinding, the green light on the tape drive will go out, and you will be prompted to "Mount DATA tape and press RETURN" again.

Unload the SYS-GEN tape. Then mount the first reel (or pack) of the File-Save tape (or disk), and make sure it is loaded and on-line.

Press RETURN.

If you have a multiple-reel File-Save, you will be prompted at the end of each reel to mount the next reel.

The following screen is displayed.

Mount DATA tape and press RETURN
L2000# time date DATA File-Save
Seq# of this data tape: 0 0 0 0
Is this the right tape (Y/N)?

Check the tape label displayed to verify that this is your most recent file-save tape (or disk). If it is the most recent file-save, enter Y and press RETURN.

The File-Restore will begin. Each filename on the tape will be listed on your screen. When all files have been restored, the following screen is displayed.

Update/transaction tapes (Y/N)?

Enter N and press RETURN.

The following screen is displayed.

```
Update/transaction tapes (Y/N)? N
Saving Monitor
Linking workspace for line 0
```

```
date time Logon please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright date The Ultimate Corp. >>>
<<< time Release XX Rev XX date >>>
```

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

Press RETURN.

The following screen is displayed.

```
date time Logon Please:
```

```
<<< Welcome to the Ultimate Computer System >>>
<<< Copyright date The Ultimate Corp. >>>
<<< time Release XX Rev XX date >>>
```

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

```
Linking secondary TCL workspaces
```

```
X additional task workspaces initialized
```

```
time date
```

```
Time =
```

Enter the time in military format (HH:MM:SS) and press RETURN.

For example, enter 5pm as 17:00:00. The following screen is displayed.

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

```
Linking secondary TCL workspaces
```

```
X additional task workspaces initialized
```

```
time    date
```

```
Time = 17:00:00
```

```
17:00:00 date
```

```
Date =
```

Enter the date in the following format: MM/DD/YY and press RETURN.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

```
Linking secondary TCL workspaces
```

```
X additional task workspaces initialized
```

```
time    date
```

```
Time = 17:00:00
```

```
17:00:00 date
```

```
Date = 02/03/86
```

```
17:00:00 03 Feb 1986
```

The system will display several messages. One error message, "Ultimate Operating System does not Verify," is to be expected at this time. The system will verify when the upgrade is complete.

The following screen will be displayed.

<<<Verifying software>>>
System software verified

Do You Wish to Start Parallel Printer 0 (<CR>=NO, Y=YES) ?

If you have a parallel printer, type **Y**. If you do not have a parallel printer, just press RETURN. The following screen is displayed.

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.

date time Logon please:

You may now log on to the system. If you did not start a parallel printer, the following screen is displayed.

date time Logon please:

NOTE: Do not use your application programs until you complete the following steps.

Upgrading An Existing System

8. Make sure you are logged on to the SYSPROG account and at TCL.

9. Mount the SYS-GEN, and make sure it is loaded and on-line. Type

T-ATT *n* and press RETURN.

Replace *n* with the number of the tape drive on which the SYS-GEN is mounted. Then, to rewind the tape to the beginning, type

T-REW and press RETURN.

10. Upgrade the Master Dictionary of SYSPROG. Type

T-SPACE 19 and press RETURN.

WARNING: *This command skips 19 files on tape. The names of the files will be displayed on the screen. If the last file listed is not the "STAT-FILE," then type T-REW and press RETURN 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 the Ultimate TAC.*

11. Type

T-LOAD MD (O,I) and press RETURN.

12. Upgrade files in the SYSPROG, WP, UTILINK, and ULTIMATION accounts.

a. Make sure the SYS-GEN is loaded and on-line.

b. Make sure you are logged on to the SYSPROG account and at TCL.

c. Type

UPG-REV and press RETURN.

d. If you are upgrading to Revision 195B or later, skip to Step 15.

The words "END OF FILE" will appear several times on your screen. Then the following message is displayed.

If last file name displayed is 'DICT MD', Enter return

Else enter 'ABORT'

Press RETURN if the last filename displayed is "DICT MD."

If the last file name displayed is not "DICT MD," enter ABORT. You will return to TCL.
Do not proceed. Call the Ultimate TAC.

Once you press RETURN, the program displays the names of all application accounts to be upgraded. At the prompt "(C)ontinue or (Q)uit?", type C to continue. The SYSPROG Main Menu will be displayed. Press RETURN to go to TCL.

13. Make sure you are logged on to the SYSPROG account and at TCL.
14. Upgrade your application accounts.

If Installing Revision 185Q or Later

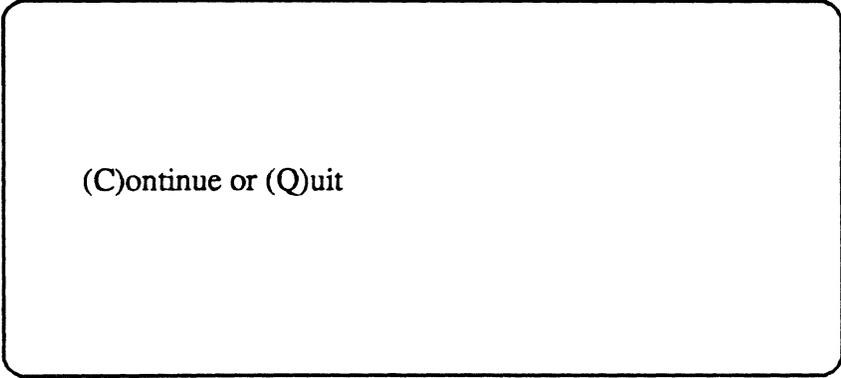
Proceed to Step 16.

If Installing a Revision Prior to 185Q

Type

RUN DICT SYSPROG-PL UPG.NEWAC and press RETURN.

15. The program displays the names of all application accounts to be upgraded. The following message is displayed.



Enter C to continue.

The system will now upgrade the Master Dictionary of each user account displayed.

16. Check to see if the system verifies. From the SYSPROG account, go to TCL.

Type

VERIFY-SYSTEM and press RETURN.

Upgrading An Existing System

The system should now verify. If you see a message indicating a mismatch, call the Ultimate TAC.

17. Reload ULTICALC.

If you were using UltiCalc before the upgrade, you must re-install it. To do so, log on to the ULTICALC account. At the UltiCalc menu, enter I to select "Install UltiCalc on the system."

18. Create a Boot tape.

A boot tape contains only the programs needed to boot your system. A SYS-GEN contains the programs to boot your system, and it also contains system accounts and system files. Ultimate recommends that you create a boot tape now, and that you create a duplicate SYS-GEN at the time of your next File-Restore.

Follow the instructions in the System Commands Guide and the System Management and Support Guide to create a boot tape and a duplicate SYS-GEN tape.

19. The upgrade is now complete. You may log on and begin your normal work. Keep the file-save from Step 1 from your previous release for future reference.

END OF UPGRADE METHOD 2

2.3 METHOD 3: THE SELECTIVE UPGRADE METHOD

Do not use this method unless you are instructed to do so by the Ultimate TAC.

NOTE: All users must be off the system until the upgrade is complete.

1. Make sure everyone is logged off the system. Do a complete File-Save of the system.

This step is important in ensuring that you will be able to recover your files in the event of a mishap during the upgrade. Ultimate strongly recommends that you take the time to do this now. Otherwise, you may spend hours trying to recover your files later, in the event of a problem.

2. Now, you should check the File-Save tape(s) to make sure there are no parity errors.

This procedure involves doing a selective restore on an account and file that does not exist. This forces the system to read all the tape(s), thereby checking the tape(s) for parity errors. Parity errors are signaled by the message "Parity error! (A)cccept (R)etry (Q)uit."

- a. Mount Reel #1 of your File-Save tape (or the tape you will use for backup). Make sure the tape is on-line.
- b. At TCL, type

LOGTO SYSPROG and press RETURN.

Then press RETURN again to go to TCL. At TCL, type

T-ATT *n* and press RETURN.

Replace *n* with the number of the tape drive on which the tape is mounted. Then, at TCL, type

SEL-RESTORE SYSPROG-PL * and press RETURN.

You will be prompted:

Account name on tape?

Type a name that you know does not exist on the tape. For example, type TEST-ACCOUNT and press RETURN. Next, you will see the following prompt:

Filename on tape?

Again, type a name that does not exist on the tape. For example, type TEST-FILE and press RETURN.

Upgrading An Existing System

- c. The system will begin reading the tape for the account and file names you entered. If the tape is one reel of a multiple-reel set, then you will be prompted to enter Reel #2, then Reel #3, etc., until all reels have been mounted. Of course, the system will not find the account and file names, so when all reels have been mounted, you will see the message:

0 items restored

If you see the message "Parity error! (A)cept (R)etry (Q)uit" on the terminal at any point during this procedure, then your tape(s) contains parity errors, and should not be used. Press Q to quit. Use another set of tapes to do a File-Save. Then, try this test again. If the entire procedure runs without displaying the message, then your tape(s) does not contain parity errors.

3. Logon to the SYSPROG account and go to TCL. Type
:WARMSTOP and press RETURN.

The Warmstop procedure brings your system down in a controlled manner, ensuring that the integrity of your data is preserved.

Ignore messages displayed by the :WARMSTOP verb.

4. Mount the SYS-GEN tape (or disk), and make sure it is loaded and online.
5. Initialize the system (see instructions in Appendix A). The following screen is displayed.

This is the Ultimate Operating System

System Startup Options:
(C)oldstart
(D)iagnostics Monitor
(F)ile Restore
(W)armstart

Enter Option(s) or ? for help:

Enter C

This option starts a Coldstart.

In the next screen, you are asked for your system serial number.

System serial # is presently BVxxxx
Enter system serial # or <CR> to accept

Enter your System Serial Number

For example, enter BV0000. If the correct serial number is shown, press RETURN to accept it. You may reenter the correct number if you made a mistake. Then press RETURN after you enter the correct number.

The following screen is displayed.

System serial # is presently BVxxxx
Enter system serial # or <CR> to accept
Mount ABS tape and enter number of files to skip, if any:

Press RETURN.

Do not enter a number. Your SYS-GEN tape should already be loaded. The following screen is displayed.

```
<<< Welcome to the Ultimate Computer System >>>  
<<< Copyright date The Ultimate Corp. >>>  
<<< time Release XX Rev XX date >>>
```

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

Press RETURN.

The following screen is displayed.

```
date time Logon Please:  
  
<<< Welcome to the Ultimate Computer System >>>  
<<< Copyright date The Ultimate Corp. >>>  
<<< time Release XX Rev XXX date >>>  
  
This is the Cold-Start Procedure  
Enter <CR> to continue  
  
Linking secondary TCL workspaces  
  
X additional task workspaces initialized  
  
time date  
  
Time =
```

Enter the time in military format (HH:MM:SS) and press RETURN.

For example, enter 5pm as 17:00:00. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

      time  date

Time = 17:00:00
17:00:00  date
Date =
```

Enter the date in the following format: MM/DD/YY and press RETURN.

For example, enter February 3, 1986 as 02/03/86. The following screen is displayed.

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

Linking secondary TCL workspaces

X additional task workspaces initialized

      time  date

Time = 17:00:00
17:00:00  date
Date = 02/03/86
17:00:00 03 FEB 1986
```

Upgrading An Existing System

The system will display several messages. One error message, "Ultimate Operating System does not Verify," is to be expected at this time. The system will verify when the upgrade is complete.

The following screen will be displayed.

```
<<<Verifying software>>>
System software verified

Do You Wish to Start Parallel Printer 0 (<CR>=NO, Y=YES) ?
```

If you have a parallel printer, type **Y**. If you do not have a parallel printer, just press RETURN. The following screen is displayed.

```
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.

date time Logon please:
```

You may now log on to the system. If you did not start a parallel printer, the following screen is displayed.

>>date time Logon please<<<

NOTE: Do not use your application programs until you complete the following steps.

6. Logon to the SYSPROG account and go to TCL.
7. Make sure the SYS-GEN is loaded and online. Type

T-ATT *n* and press RETURN.

Replace *n* with the number of the tape drive on which the tape is mounted. Then type

T-REW and press RETURN to rewind the tape to the beginning.

8. Type

T-SPACE 19 and press RETURN.

WARNING: *This command skips 19 files on tape. The names of the files will be displayed on the screen. The last file skipped should be "STAT-FILE." If the last file is not "STAT-FILE," then type T-REW and press RETURN 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 the Ultimate TAC.*

9. At TCL, type

T-LOAD MD (O,I) and press RETURN.

10. Upgrade files in the SYSPROG, WP, UTILINK, and ULTIMATION accounts.

- a. Make sure the SYS-GEN is loaded and on-line.

- b. Make sure you are logged on to the SYSPROG account and at TCL.

- c. Type

UPG-REV and press RETURN.

- d. If you are upgrading to Revision 195B or later, skip to Step 12.

Upgrading An Existing System

The words "END OF FILE" will be listed several times on your screen. Then the following message is displayed.

If last file name displayed is 'DICT MD' Enter return
Else enter 'ABORT'

Press RETURN if the last filename displayed is "DICT MD."

If the last file name displayed is not "DICT MD," enter ABORT. You will return to TCL.
Do not proceed. Call the Ultimate TAC.

Once you press RETURN, the program displays the names of all application accounts to be upgraded. At the prompt "(C)ontinue or (Q)uit?", type C to continue. The SYSPROG Main Menu will be displayed. Press RETURN to go to TCL.

11. Upgrade your application accounts.

If Installing Revision 185Q or Later

Proceed to Step 13.

If Installing a Revision Prior to 185Q

At TCL, type

RUN DICT SYSPROG-PL UPG.NEWAC and press RETURN.

12. The program displays the names of all application accounts to be upgraded. The following message is displayed.

(C)ontinue or (Q)uit

Enter **C** to continue.

The system will now upgrade the Master Dictionary of each user account.

13. Check to see if the system verifies. From the SYSPROG account, go to TCL.

Type

VERIFY-SYSTEM and press RETURN.

The system should now verify. If you see a message indicating a mismatch, call the Ultimate TAC.

14. Remove the SYS-GEN tape from your system.
15. Create a Boot tape.

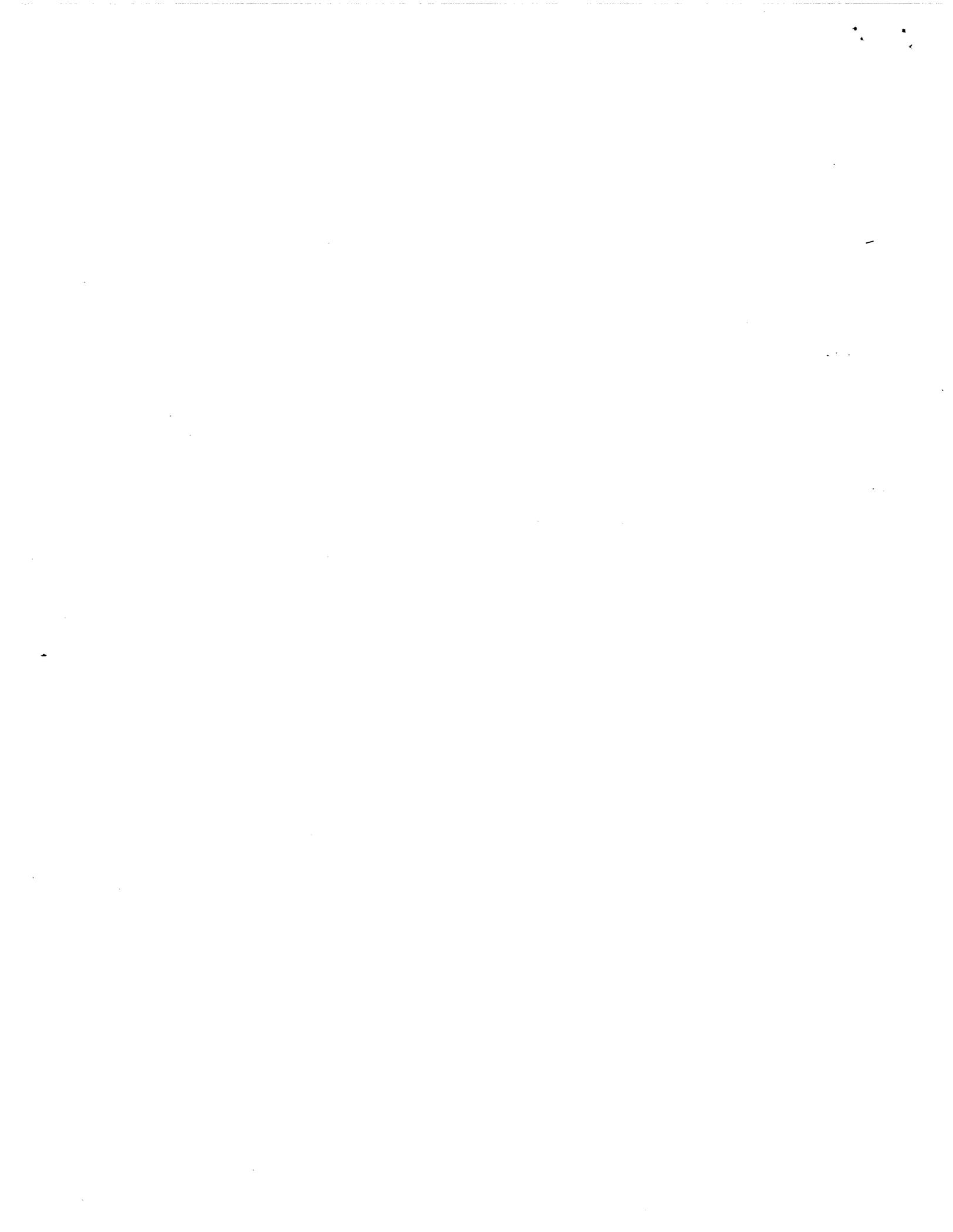
A boot tape contains only the programs needed to boot your system. A SYS-GEN contains the programs to boot your system, and it also contains system accounts and system files. Ultimate recommends that you create a boot tape now, and that you create a duplicate SYS-GEN at the time of your next File-Restore.

Follow the instructions in the System Commands Guide and the System Management and Support Guide to create a boot tape and a duplicate SYS-GEN tape.

16. The upgrade is now complete. You may log on and begin your normal work. Keep the file-save from Step 1 from your previous release for future reference.

Ultimate recommends that you do a file-save and full file-restore as soon as possible.

END OF UPGRADE METHOD 3



3 FORMATTING A DISK DRIVE

The Diagnostics Monitor is run offline. This means that you are not able to run your system in the normal mode. Only line zero is activated. The Ultimate Diagnostics Monitor has two modes of operation:

1. Formatting
2. Diagnostics

This document will only discuss the option for formatting your disk (consult the *Operations and Maintenance Guide* for more detailed information). These instructions apply to Revisions 186C and later.

3.1 FORMATTING A DISK DRIVE FOR 1410 SYSTEMS

Follow the instructions in this section if you are formatting a disk drive for 1410 systems (systems with WREN II 72mb disk drives). If you want to format a disk drive for a 1420 or 1430 system (systems with WREN III 145 mb disk drives), go to Section 3.2.

WARNING: *If you format a disk, you will destroy all data on that disk. If you want to save the data, do a File-Save first. If you upgrade to Revision 185S or later, you must format your disk drives.*

1. Boot your system, as instructed below.
 - a. Make sure the system is powered on. The AC PRESENT and DC ON lights should be on. (If not, turn on the two power switches: one in the front and one in the back.)
 - b. Load the Ultimate SYS-GEN tape, and raise the lock lever.
 - c. Press the RESET switch. The System Startup Options menu is displayed.
2. At the System Startup Options menu, type D to load the Diagnostics Monitor. The following screen is displayed.

ST506 disc sub-system
Format and disc diagnostic utility

- (F)ormat a drive
- (B)ad sector map read
- (R)ead disc parameters (vtoc)
- (W)rite disc parameters (vtoc)
- (D)rive diagnostics menu
- (S)ystem debugger utility
- (E)xit to options menu

Select option:

3. Type **F** to select "Format a drive." A screen similar to the following is displayed.

```
ST506 disc sub-system
Format and disc diagnostic utility

(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu

Select option: F

Enter drive number (0-2)
```

4. Enter the number of the drive (**0**, **1**, or **2**) that you want to format. The following screen is displayed.

```
ST506 disc sub-system
Format and disc diagnostic utility

(F)ormat a drive
(B)ad sector map read
(R)ead disc parameters (vtoc)
(W)rite disc parameters (vtoc)
(D)rive diagnostics menu
(S)ystem debugger module
(E)xit to options menu

Select option: F

Enter drive number (0-2).. 0
Enter (Y)es to continue
```

5. Type **Y** to continue the formatting process. The following screen is displayed.

ST506 disc sub-system
Format and disc diagnostic utility

- (F)ormat a drive
- (B)ad sector map read
- (R)ead disc parameters (vtoc)
- (W)rite disc parameters (vtoc)
- (D)rive diagnostics menu
- (S)ystem debugger module
- (E)xit to options menu

Select option: F

Enter drive number (0-2).. 0
Enter (Y)es to continue... Y

Reading map

If your disk has never been formatted with Ultimate, go to Step 6. If it has been formatted with Ultimate before, go to Step 7.

6. If your disk has never been formatted with Ultimate, you see this message

Enter vendor's log? (Y/N)

CAUTION: *If you are formatting a new drive, you must enter N at this prompt. Then, at any time in the future when formatting the drive, you should enter Y.*

To enter the vendor's log of defective tracks on the disk, type Y, then go to Step 8. If you do not want to enter this information, type N, then go to Step 9.

7. If your disk has been formatted with Ultimate before, you see this screen.

An Ultimate error log already exists on this disk
Do you want to:
(U)se existing bad sector map
(E)nter vendor's error log
(Q)uit
Enter selection:

To use the existing table of bad sectors, type U, then go to Step 9. To enter the vendor's error log of defective tracks on the disk, type E, then go to Step 8. To quit, type Q.

8. Follow this step to enter the vendor's error log. Your screen should look like the following.

```
Vendors log
Cyl: hd: bcai: bl: sec:
```

NOTE: *You must enter the information in decimal, not in hexadecimal.*

Your cursor is positioned at "Cyl." You will use this screen to enter the information that appears on the disk drive label. Look on the label and find the first cylinder number listed. Then type that number and press RETURN. Then type the corresponding head number and press RETURN. Then type the numbers listed as bcai, bl (block), and sec (sector). Press RETURN after each number. The cursor returns to the Cyl prompt. Continue entering the numbers shown on the label.

When you finish entering the vendor's error log, press RETURN at the next Cyl prompt to continue. You will see this message:

Data correct (Y/N)

Check your typing. If the information you entered is correct, type Y and press RETURN, then go to Step 9. If not, type N and press RETURN. Then reenter the information.

9. You should see the following message:

Assign alternate tracks? (Y/N)

To assign alternate tracks for defective tracks, type Y and press RETURN, and go to Step 10. If you do not want to assign alternate tracks, type N and press RETURN, then go to Step 11.

10. Follow this step to assign alternate tracks. Your screen should look like the following.

```
Input cylinder in hex:
Input head no.:
Input sector in hex:
```

Type the cylinder number (*in decimal*) of the first alternate track to be used when a defective track is found. Then press RETURN. Then type the corresponding head and sector numbers, and press RETURN after each. Continue entering the cylinder, head, and sector numbers of alternate tracks. When you finish entering the alternate tracks, press RETURN at the next "Input cylinder" prompt. Then go on to Step 11.

11. You should see the following message:

Continue formatting drive? (Y/N)

To continue, type **Y** and press RETURN. (To cancel the format, type **N** and press RETURN.) The disk will be formatted, and your screen will look as follows:

Formatting...
cylinder:nnn trk: nnn Main stat = X'nn' Extended stat = X'nnnn'

Once these messages have been displayed, then the formatting process is complete. Make sure you format all drives on your system.

NOTE: *Several error messages may occur during the formatting process. This is to be expected. For most errors that appear, you will be prompted to "Type (CR) to continue." Press RETURN, and the error will usually be relocated automatically. However, if the message "Unrecoverable disk error" appears, call the Ultimate TAC.*

3.2 FORMATTING A DISK DRIVE FOR 1420 AND 1430 SYSTEMS

Follow the instructions in this section to format a disk drive for 1420 and 1430 systems (systems with WREN III 145 mb disk drives).

WARNING: *If you format a disk, you will destroy all data on that disk. If you want to save the data, do a File-Save first. If you upgrade to Revision 185S or later, you must format your disk drives.*

1. Boot your system, as instructed below.
 - a. Make sure the system is powered on. The AC PRESENT and DC ON lights should be on. (If not, turn on the two power switches: one in the front and one in the back.)
 - b. Load the Ultimate SYS-GEN tape, and raise the lock lever.
 - c. Press the RESET switch. The System Startup Options menu is displayed.
2. At the System Startup Options menu, type **D** to load the Diagnostics Monitor. The following screen is displayed.

Diagnostic monitor menu

(F)ormat utility menu
(D)isc diagnostics menu
(H)ardware configuration
(B)inary save and restore (*this option is not available*)
(S)ystem debugger utility
e(X)it to options menu

Select option:

3. Type F to select Format utility menu. The following screen is displayed.

Format utility menu (rev 3)

(F)ormat disc (data erased)
(S)how manufacturers defect log
(E)nter manufacturers defect log
(D)isplay defective sector log
(R)elocate a defective sector
e(X)it to diagnostic monitor

Select option:

4. Type F to select Format disc. The following screen is displayed.

Format utility menu (rev 3)

(F)ormat disc (data erased)
(S)how manufacturers defect log
(E)nter manufacturers defect log
(D)isplay defective sector log
(R)elocate defective sector
e(X)it to diagnostic monitor

Select option: F

Enter drive number (0-5)

5. Enter the number of the drive (0, 1, 2, 3, 4, or 5) that you want to format. The following screen is displayed.

Format utility menu (rev 3)

(F)ormat disc (data erased)
(S)how manufacturers defect log
(E)nter manufacturers defect log
(D)isplay defective sector log
(R)elocate defective sector
e(X)it to diagnostic monitor

Select option: F

Enter drive number (0-5) 0

Enter (Y)es to continue

6. Enter Y to continue the formatting process. As the drive is being formatted, the screen will look like the following.

cyl:nnnn trk:nn sec:nn

Once these messages have been displayed, then the formatting process is complete. Make sure you format all drives on your system.

NOTE: *Several error messages may occur during the formatting process. This is to be expected. For most errors that appear, you will be prompted to "Type (CR) to continue." Press RETURN, and the error will usually be relocated automatically. However, if the message "Unrecoverable disk error" appears, call the Ultimate TAC.*

APPENDIX A: BOOTING THE SYSTEM

Throughout this manual, you will be asked to "boot" or "initialize the system." The following steps describe the procedure.

1. Make sure the AC PRESENT light is ON. (Refer to the POWERING ON instructions in Section 2, of the 1400 Operations and Maintenance Manual.)
2. Load the Ultimate SYS-GEN tape. (Refer to the tape loading instructions in Section 4, of the 1400 Operations and Maintenance Manual.)
3. If both the AC PRESENT and DC ON lights are on, press the RESET button. If only the AC PRESENT light is on, press the POWER ON button. The following screen is displayed.

This is the Ultimate Operating System

System Startup Options:

(C)oldstart
(D)iagnostic Monitor
(F)ile Restore
(W)armstart

Enter Option:

Refer to Section 6, of the 1400 Operations and Maintenance Manual for information on each of the System Startup Options.

NOTE: *If the system was :WARMSTOPPED prior to being powered off, refer to Section 6.4 of the 1400 Operations and Maintenance Manual to WARMSTART the system. If the system was not :WARMSTOPPED prior to being powered off, then refer to Section 6.1 of the 1400 Operations and Maintenance Manual to COLDSTART the system.*

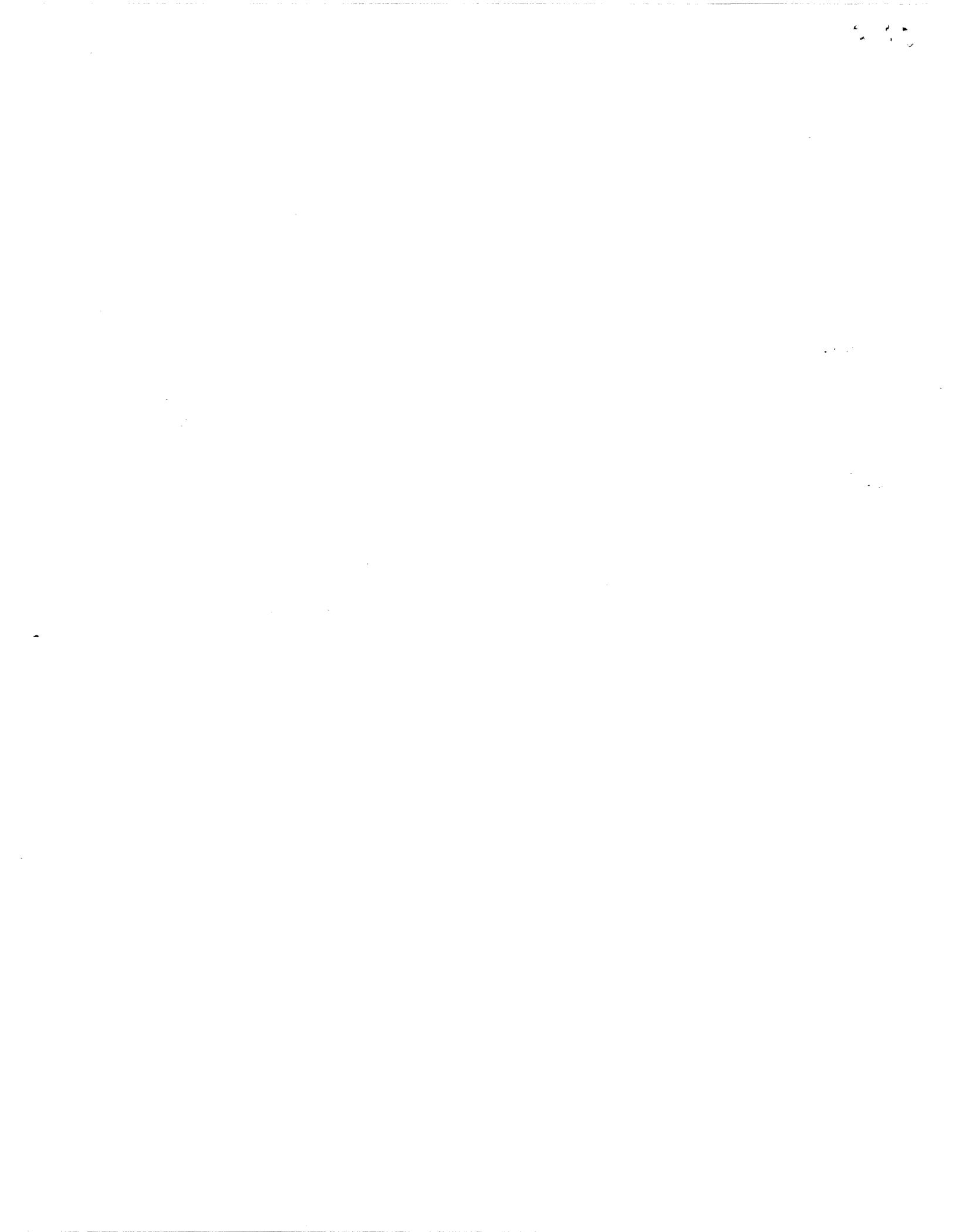
APPENDIX B: LIST OF ACCOUNTS ON THE SYS-GEN

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:)
 SYSTEM
 SYSTEM-ERRORS
 BLOCK-CONVERT
 SECURITY
 PROCLIB
 SYSLIB
 SYSTEM (Synonym)
 SYSPROG
 ERRMSG
 SPSYM
 GAMES
 TRAINING
 ACC
 SYSTEM (Q-pointers, etc.)
 T-DUMP of STAT-FILE

Several files are T-DUMPed at the end of the SYS-GEN tape. These files are used for the selective upgrade method, and for updating the WP, ATP, ULTILINK, and ULTIMATION accounts. To position the tape at the first file, do 19 T-FWDs from load point. The files are dumped as follows.

| | | |
|-------------------|--------------------|----------------------------|
| SYSPROG MD | M2.OSYM | WP Master Dictionary |
| DICT NEWAC | DICT STAT-FILE | DICT WP-PROGS |
| ERRMSG | DICT BLOCK-CONVERT | WP-PROGS, TABLES |
| DICT TERMDEF | USER-MODES | DICT SPSYM |
| TERMDEF | USER-MODES, SOURCE | SPSYM |
| CONVERSION, DOC | DICT SYSPROG-PL | SPSYM, DF |
| CONVERSION, PGM | DICT ACC | DICT OA.PROG |
| CONVERSION, PROC | DICT SYS-ERRS | OA.PROC |
| CONVERSION, TABLE | DICT DOCUMENT | ULTIMATION MD |
| OSYM | DOCUMENT | account-save of WP |
| PSYM | DOCUMENT, DELTA | account-save of ATP |
| OBJECT | DOCUMENT, UPG | account-save of ULTILINK |
| M1.OSYM | DOCUMENT, SYSTEM | account-save of ULTIMATION |
| M2.PSYM | DICT REALLOC-FILE | |



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 of Manual: _____

Document No.: _____ Date: _____

Comments

FROM:

Name: _____ System Number: _____

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

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Place
Stamp
Here

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Attn: Documentation Manager**

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Ultimate Technical Support Bug Form

Priority _____ Verified By _____ Date Received _____ QC Number _____

For Ultimate Use Only

Category Affected: Systems, Applications, Other _____

Release Affected _____ Date Submitted _____

Contact Name _____

Your System No. _____ Telephone No. _____

Detailed Description

System Configuration (memory size, number of ports, types of terminals and printers, etc.)

Response/Status

Date _____

FROM:

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

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Ultimate Technical Support Suggestion Form

Priority _____ Verified By _____ Date Received _____ QC Number _____

For Ultimate Use Only

Category Affected: Systems, Applications, Other _____

Release Affected _____ Date Submitted _____

Contact Name _____

Your System No. _____ Telephone No. _____

Detailed Description

System Configuration (memory size, number of ports, types of terminals and printers, etc.)

Response/Status

Date _____

FROM:

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

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THE ULTIMATE CORP.

717 RIDGEDALE AVENUE
EAST HANOVER, NEW JERSEY 07936
(201) 887-9222

Voice Mail (201) 884-0001
Telecopier (201) 887-6139
