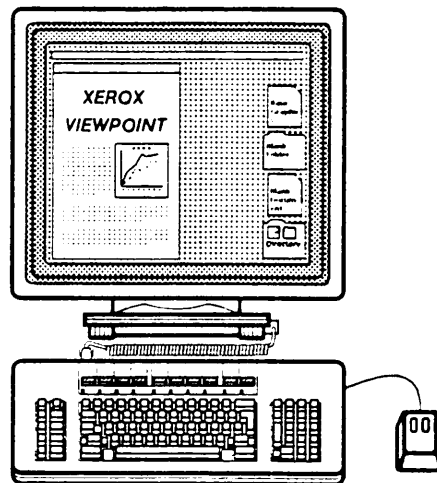


# PASSWORD

## Customer Technical Bulletin



### Volume 1, Issue 1

- Topics:**
- \* Diagnostics
  - \* Error Recovery
  - \* Diagnostics Glossary
  - \* Repartitioning 6085 Workstations
  - \* Errors in MS DOS User's Guide
  - \* Read/Write - Read Only Trident Switch
  - \* Upgrading Auxiliary Packs
  - \* File Service Back-up Restore Warnings
  - \* Time Discrepancies on an Internet

---

<b>PASSWORD</b> .....	<b>XEROX</b>
-----------------------	--------------

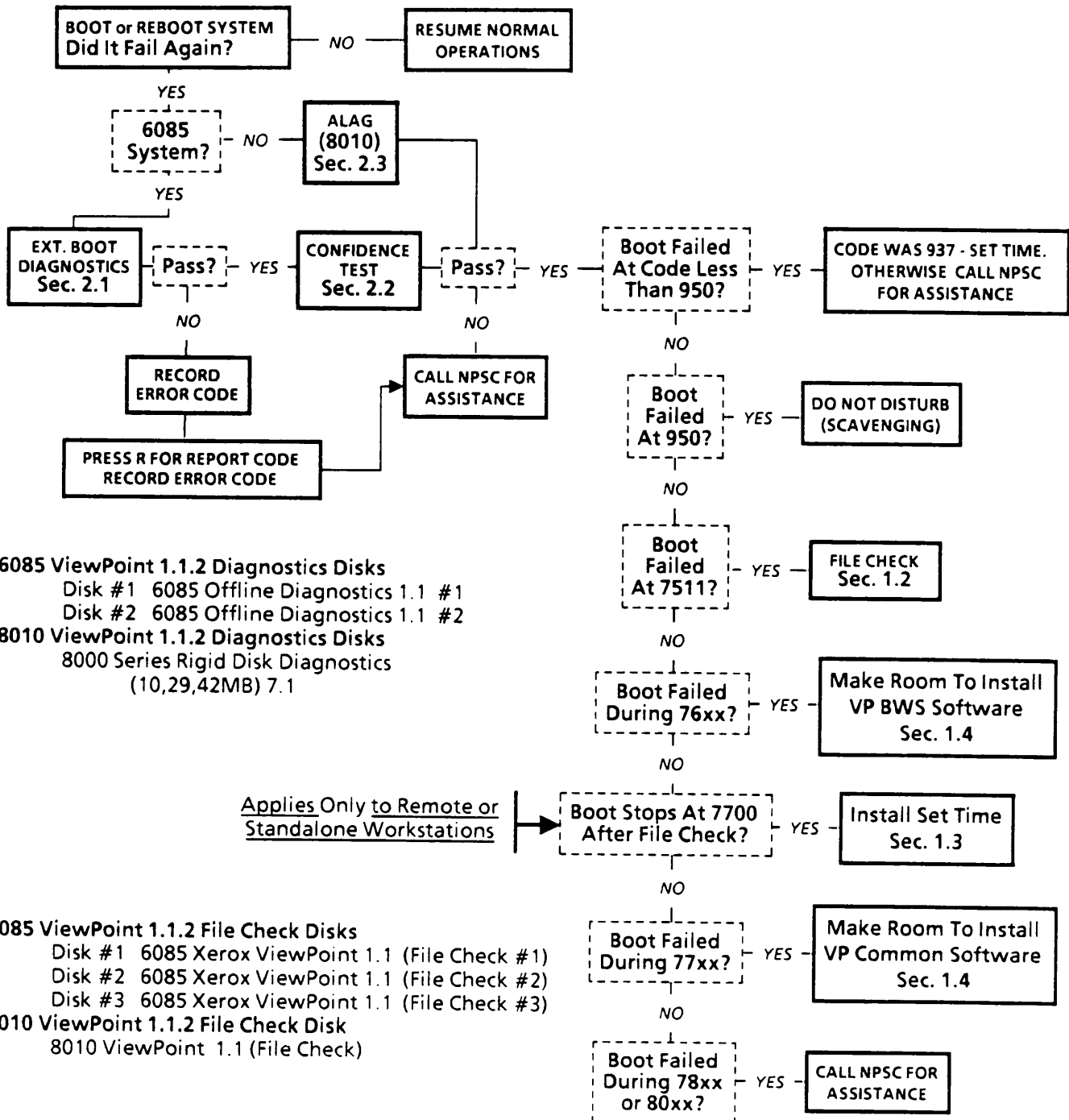
## TABLE OF CONTENTS

<u>BULLETIN TOPICS</u>	<u>VOLUME</u>	<u>ISSUE</u>
<b>DIAGNOSTICS:</b>		
VP Diagnostics Flowchart	1	1
File Check	1	1
Installing Set Time Utility	1	1
Special Installation and Error Recovery Commands	1	1
Common MP and Cursor Codes	1	1
<b>ERROR RECOVERY:</b>		
6085 Extended Boot Diagnostics	1	1
6085 Confidence Test	1	1
8010 ALAG	1	1
6085 System Configuration Utility	1	1
<b>DIAGNOSTICS GLOSSARY</b>	1	1
<b>REPARTITIONING 6085 WORKSTATIONS</b>	1	1
<b>ERRORS IN MS DOS USER'S GUIDE</b>	1	1
<b>READ/WRITE - READ ONLY TRIDENT SWITCH</b>	1	1
<b>UPGRADING AUXILIARY PACKS</b>	1	1
<b>FILE SERVICE BACK-UP RESTORE WARNINGS</b>	1	1
<b>TIME DISCREPANCIES ON AN INTERNET</b>	1	1

# PASSWORD

XEROX

**VIEWPOINT DIAGNOSTICS FLOWCHART:** If your system has been up, and you were working inside an application when it crashed; write down the crash codes starting at 9999, then try re-booting first. Reference Common MP and Cursor Codes.



- 6085 ViewPoint 1.1.2 Diagnostics Disks**  
 Disk #1 6085 Offline Diagnostics 1.1 #1  
 Disk #2 6085 Offline Diagnostics 1.1 #2
- 8010 ViewPoint 1.1.2 Diagnostics Disks**  
 8000 Series Rigid Disk Diagnostics  
 (10,29,42MB) 7.1

- 6085 ViewPoint 1.1.2 File Check Disks**  
 Disk #1 6085 Xerox ViewPoint 1.1 (File Check #1)  
 Disk #2 6085 Xerox ViewPoint 1.1 (File Check #2)  
 Disk #3 6085 Xerox ViewPoint 1.1 (File Check #3)
- 8010 ViewPoint 1.1.2 File Check Disk**  
 8010 ViewPoint 1.1 (File Check)

# PASSWORD ..... XEROX

## DIAGNOSTICS

### FILE CHECK

#### Background

File Check is a high level scavenger. Its purpose is to check the relationships of disk files, logical files and also check on attribute consistency. File Check is a Pilot Logical Volume scavenger and a Client File System scavenger for the User Volume on workstations running ViewPoint Software and OS Software. It does the following:

- Reconstructs the Pilot file system using the labels of each page as the truth. (Assumes there are no label errors. If label error does exist, files cannot be reconstructed accurately.)
- Reads each sector and reconstructs the Logical Volume root page and accelerator files. (Root page and accelerator files are pointers to actual location of all other files.)
- Identifies problems in client files, and reports them to the client.
- Reconstructs the directory system (hierarchy of files). It determines which documents belong in which file folders.
- Repairs damaged files in User Area if possible; otherwise, it deletes them.

**CAUTION: NEVER FILE CHECK A SYSTEM THAT DOES NOT HAVE SOFTWARE INSTALLED.**

**CAUTION: Always check the stability of the hardware prior to File Checking a workstation by performing diagnostics. Irrecoverable data loss could occur if this is not done.**

#### When is a File Check Necessary?

File Check is necessary when:

- A system is interrupted during normal operation that scatters or erases system or software files (power surges).
- Systems hangs up at 7511 (ViewPoint Systems) or 7501 on (OS5.X Systems) during a normal boot.
- Encountering a message of "Insufficient Resources" when opening a document icon. (Reboot, initially. If problem still exists, install File Check Software. (VP 1.1).
- Incurring a 0915 code during a normal boot and diagnostics pass.
- Encountering a system message of "VP Volume Needs Scavenging".
- Bad Pages found in the User Area on a Rigid Disk.

**CAUTION: Always check the stability of the hardware prior to File Checking a workstation by performing diagnostics. (Reference Sec. 2.1 / 6085 Extended Boot Diagnostics, Sec. 2.2 / 6085 Confidence Test, or Sec. 2.3 / 8010 ALAG).**

**Irrecoverable data loss could occur if this is not done. If diagnostics passes run File Check. If not, NPSC should be contacted.**

Page 1 of 2

---

# PASSWORD ..... XEROX

## DIAGNOSTICS

### FILE CHECK cont'd

How To Run File Check On ViewPoint Workstations via Floppy Disk:

1. Insert the Installer #1 diskette into the floppy drive and reboot the workstation. When the soft keys appear at the bottom of the screen, **press the (6085) <F2> key** or boot from **<0002>** on the (8010). When prompted, **remove Installer #1** from the floppy drive and insert Installer #2. (A message of **"No Response from Time Server"** will appear at this point on Standalone and Remote workstations. Insert the correct time and date and continue.

**Note:** 8010 Viewpoint workstations have only one Installer disk labeled **"8010 ViewPoint Installer"**.

2. When the Main Menu appears on the screen, **type the number corresponding to the option labeled, "ViewPoint: 6085/8010 Special Installation and Error Recovery Commands"**, and **press the <RETURN> key** to access the Recovery Scripts.

# PASSWORD ..... XEROX

## ERROR RECOVERY

### INSTALLING SET TIME UTILITY

#### Background

Set Time Utility is a software file that is designed to install time on Standalone or Remote workstations. This file resides on the ViewPoint Standalone Common Software and the VP RemoteCom Common Software diskettes.

#### When Is Set Time Utility Installed

This procedure will become necessary when:

- A Standalone or Remote workstation remains on a 7700 code after a File Check. (File Check erases the Set Time Utility).
- A Standalone or Remote workstation remains on an 0921 code when booting.
- Incorrect time or date problem offset from the proper time zone.

#### How To Install Set Time Utility

1. Insert the Installer #1 diskette into the floppy drive and **reboot** the workstation. When the soft keys appear at the bottom of the screen, **press** the **<F2>** key (6085) or boot from **<0002>** (8010). When prompted, **remove** Installer #1 from the floppy drive and **insert** Installer #2. A message of ("**No response from time server**") will appear at this point on Standalone and Remote workstations. **Type** the correct time and date and proceed to the next step.

**Note:** 8010 workstations have only one Installer disk labeled "**8010 ViewPoint Installer**".

2. When the Main Menu appears on the screen, type the number corresponding to the option labeled, "**ViewPoint:6085/8010 Special Installation and Error Recovery Commands**", and **press** the **<RETURN>** key to access the Recovery Scripts.
3. When the "Recovery Scripts" menu appears on the screen, **type** the number corresponding to the option labeled:
  - "**Install Set Time Utility On Standalone 6085 / 8010 Workstation**" or
  - "**Install Set Time Utility On Remote 6085 / 8010 Workstation**"and **press** the **<RETURN>** key.
4. Insert the VP Standalone Common or VP RemoteCom Common Software diskette into the disk drive and **press** the **<RETURN>** key.
5. When the software installation is complete, the message "**Floppy Closed**" will appear. Select from the resulting menu, the option labeled, "**Start 6085/8010 System**".

If any problems occur while Installing Set Time Utility on the workstation, call the NPSC.

Page 1 of 1

---

# PASSWORD ..... XEROX

## DIAGNOSTICS

### SPECIAL INSTALLATION AND ERROR RECOVERY

#### Background

The Error Recovery Commands are obtained by booting the Installer diskette. After the diskette is booted, the Installer's Main Menu is displayed. From this menu, recovery scripts can be accessed by selecting the option of "**Special Installation and Error Recovery Commands**".

When this option is selected, a resulting menu of several recovery choices are displayed. Below are a few of those choices with notations of when to use certain Recovery Scripts.

Before doing any reloading of software, the user should **write down** the MP or Cursor codes and **reboot**. If the system comes up; then no re-loading is necessary. If the system fails with the same codes; try re-loading software. If re-loading does not resolve the problem, contact the NPSC with the codes.

The re-load process was designed to be used if the workstation crashed during boot up after a File Check. If your system fails while using an application, try rebooting first.

Note that if you crash with xx45; where xx is 76, 77, 78 or 80, you don't re-load software. You should run Diagnostics (Reference Sec. 2.1 / 6085 Extended Boot Diagnostics, Sec. 2.2 / 6085 Confidence Test or Sec. 2.3 8010 Alag) and run File Check (Reference Sec. 1.2 / File Check). The xx45 code means you have an unrecoverable disk error.

#### When to Make Room To Install ViewPoint Basic Workstation Software

When the workstation fails to **boot** and the cursor codes **9999 / 76xx / +** cycles on the screen, the boot files (Basic Workstation Software) is either:

- Damaged
- Missing, or
- Installed improperly

Selecting this script will allow a user to delete the Basic Workstation Software without affecting the Common Software, Essential Applications, or the VP Series Application Software.

When the software is deleted, a code of **7604** appears on the screen. **Reboot** the Installer diskette to obtain the Error Recovery Scripts as before; and select the option to "**Install ViewPoint Basic Workstation Software**". The system will prompt you step-by-step through the reinstallation successfully.

---

# PASSWORD ..... XEROX

## DIAGNOSTICS

### SPECIAL INSTALLATION AND ERROR RECOVERY cont'd

#### When to Make Room To Install ViewPoint Common Software

When the workstation fails to **boot** and the cursor codes **9999 / 77xx / +** cycles on the screen, the NetCom Common, Standalone Common, RemoteCom Common and ViewPoint Common Software is either:

- Damaged
- Missing, or
- Installed improperly

Selecting this script will allow a user to delete the Common Software without affecting the Basic Workstation Software, Essential Applications, or the VP Series Application Software.

When the software is deleted, a code of **7604** appears on the screen. **Reboot** the workstation to obtain the Error Recovery Scripts and select the option to "**Install the ViewPoint:**

**NetCom Common and View Point Common, or  
Standalone Common and View Point Common, or  
RemoteCom Common and View Point Common Software".**

The system will prompt you step-by-step through the reinstallation successfully.

# PASSWORD ..... XEROX

## COMMON MP AND CURSOR CODES

- 0151 Boot device Error.** Initial Microcode cannot be fetched from the boot device.  
**Possible causes:** nonexistent device, no Initial Microcode installed on rigid or floppy, code is stored in the wrong place, no Initial Microcode installed on boot server, bad checksum on boot server's Initial Microcode, not connected to net during net boot.  
**ACTION:** Reboot workstation, if 0151 is displayed again after rebooting, run Extended Boot Diagnostics (Reference Sec. 2.1 / 6085 Extended Boot Diagnostics or Reference Sec. 2.3 / 8010ALAG) and call NPSC.
- 0201 Boot Code.** The Mesa Microcode and Germ (or Diagnostic Microcode) cannot be fetched from the boot device (software cannot be accessed from boot device).  
**Possible causes:** same as for code 0151.  
**ACTION:** Reboot Workstation, if 0201 is displayed again after rebooting, run Extended Boot Diagnostics (Reference Sec. 2.1 / 6085 Extended Boot Diagnostics or Reference Sec. 2.3 / 8010ALAG) and call NPSC.
- 0322 (8010 Workstations)**  
**Executing Ethernet loop back test.** The workstation is checking that it can successfully communicate with the transceiver. The system displays this cursor code until the connection is made or the <NEXT> key is pressed for Standalone or Remote systems.  
**ACTION:** For Standalone or Remote systems, pres the <NEXT> key. Check the Ethernet connections. Run Diagnostics. If diagnostics still fail call NPSC.
- 0915 Ethernet Debuggee Server in control.** The system is waiting to talk to a remote Ethernet debugger. A local debugger is not being used because it is too early in initialization to find the local debugger.  
**ACTION:** Run diagnostics (Reference Sec. 2.1 / 6085 Extended Boot Diagnostics, Sec. 2.2 / 6085 Confidence Test or Reference Sec. 2.3 / 8010ALAG). If both diagnostic tests passes, install and run File Check software (Reference Sec. 1.2 / File Check). If either diagnostic test fails call NPSC .
- 0921 Boot Loader device error on device being booted.**  
**ACTION:** Run diagnostics (Reference Sec. 2.1 / 6085 Extended Boot Diagnostics, Sec. 2.2 / 6085 Confidence Test or Reference Sec. 2.3 / 8010ALAG). If both tests pass, install and run File Check software (Reference Sec. 1.2 / File Check). If tests fails call NPSC.

**COMMON MP AND CURSOR CODES** cont'd

**0937 Attempting to locate time via Ethernet or hardware clock.** Pilot is attempting to get the time of day from an Ethernet Time Server. If none responds, it attempts to get the time from the hardware clock. The system displays this cursor code until the time is available from one of these sources.

**ACTION:** Check the Ethernet connections. Check with the System Administrator to see if time has been set at the server. If still unable to find time, run diagnostics and call NPSC.

**Note:** On **Standalone** and **Remote** workstations, install Set Time Utility. (Reference Sec. 1.3 / Installing Set Time Utility).

**0950 Logical Volume being scavenged.** If a Logical Volume being booted or opened is in an inconsistent state, Pilot will display this code while it scavenges (verifies the contents of the volume). The amount of time required depends on the size, occupancy and fragmentation of the Logical Volume being scavenged. **DO NOT INTERRUPT THIS CODE.**

**Note:** See the **Special Considerations** section at the end of the code list.

---

# PASSWORD ..... XEROX

## ERROR RECOVERY

### 6085 EXTENDED BOOT DIAGNOSTICS

#### Background

Extended Boot Diagnostics provide a set of tests for all hardware necessary to load and run the operational software; validating the major electronic portions of the 6085 Processor only, as well as checking the configuration.

This configuration check includes how much memory is installed, whether or not there is an installed PCE or floppy disk drive, and which rigid disk drive is installed. The Printed Wiring Assemblies (PWAs) tested are the Backplane, the Input / Output Processor (IOP), the Display Control and Memory (DCM), the Mesa Processor Board (MPB), and, when applicable, the Memory Expansion Board (MEB) and/or the Personal Computer Emulator (PCE).

Comprehensive tests on the peripheral devices are not performed. To test these components, Extended Isolation, On-Line Diagnostics and / or Off-Line Diagnostics must be used.

#### When to Run Extended Boot Diagnostics

Extended Boot Diagnostics should be run when:

- The workstation is installed, both initially and after moving the workstation to another location
- Any component of the workstation is exchanged
- Encountering a 7511 code on workstation
- Workstation fails to boot and displays a cursor code on the screen
- A problem is suspected with any of the components of the workstation

#### How To Run Extended Boot Diagnostics On 6085 Workstations From Floppy Disk

1. **Reboot** the workstation with the **Offline Diagnostics #2** diskette in the floppy drive.
2. When the soft keys are displayed at the bottom of the screen, **depress** the <F6> key **twice**, to initiate Extended Boot Diagnostics. During the progression of the Cursor Codes, all of the system hardware components along with some of the application software is being tested.

**Note:** Users of Documenter workstations should be aware that the 4045 Laser Printer must be "on" while running this diagnostic procedure or diagnostics will fail.

Page 1 of 2

---

# PASSWORD ..... XEROX

## ERROR RECOVERY

### 6085 EXTENDED BOOT DIAGNOSTICS cont'd

#### Interpreting The Results

This diagnostic test runs approximately fifteen minutes. When Extended Boot Diagnostics run successfully, the softkeys return to the display and remain until another softkey is depressed. If, however, the system fails a test during Extended Boot Diagnostics, the test stops at that test number. The Cursor Box then alternates with two sets of numbers. These are called **Error Codes**. These codes should be recorded for future reference.

By pressing <R> (for "Report"), four numbers and letters will be shown in the Cursor Box. This new code is called a **Report Code**. Record this code also. By pressing the <Spacebar>, the Report Code will flip back to the Error Codes.

Contact NPSC with both the Error Codes and Report Code. These codes help the technician in preparing to service the equipment.

## DIAGNOSTICS

### 6085 CONFIDENCE TEST

#### Background

The Confidence Test detects and reports hard errors and excessive soft errors on the 6085 rigid drive and the rigid disk controller on the High Speed Input / Output (HSIO) PWA. It determines if the rigid disk is in working order.

#### When to Run a Confidence Test

A Confidence should be run when:

- Isolating rigid disk
- Bad pages are not listed on the Bad Page Table
- Encountering a message of "**VP Volume Needs Scavenging**"
- Encountering a message of "**Physical Volume Needs Scavenging**"
- Encountering a 7511 code

#### How To Run A Confidence Test On 6085 Workstations From Floppy Disk

1. **Reboot** the workstation with the **Off-line Diagnostics #1** diskette in the floppy drive and **depress** the **<F2>** key. The system will request the **Offline Diagnostics #2** diskette. **Remove** diskette #1 out of the floppy drive and **insert** diskette #2 and **press** the **<RETURN>** key.
2. A menu will be displayed and the system will prompt the user to indicate which class of user s/he belongs to. **Choose** the option for "**Normal User**" and **press** the **<RETURN>** key.
3. A menu will be displayed and the system will prompt the user to choose an option. **Choose** the option for "**Rigid Disk Test**" and **press** the **<RETURN>** key.
4. A menu will be displayed and the system will prompt the user to choose an option. **Choose** the option for "**Confidence Test**" and **press** the **<RETURN>** key.

#### Interpreting The Results

The Confidence Test takes approximately 5 to 15 minutes to execute, depending on the size of the rigid disk. The Confidence Test results are shown with a "**PASSED**" or "**FAILED**" message. Included with the "**FAILED**" message is a Failure Code, which points to specific parts to replace or repair procedures for that failure.

**Note:** If "**FAILED**" with **Failure Codes 1, 2, 3, 7, or 8**, record the code and call the NPSC for assistance.

If "**FAILED**" with **Failure Codes 4 or 6**, record the code and call the NPSC for assistance.

Should this test pass or fail and bad pages are listed, **always** record the page number(s) along with all other data regarding those pages and call the NPSC for assistance.

## ERROR RECOVERY

### 8010 ALAG

#### Background

ALAG is a series of Automated Load And Go diagnostic tests which isolate the cause of system crashes related to the rigid disk for an 8010 user. Running ALAG will determine the problem and either fix it or instruct the user for the appropriate repair action.

ALAG is a starting point for all troubleshooting procedures on the 8010 workstation. This series of diagnostic tests verify the processor and rigid disk drive for technical and software related failures. When successful, the total run time for ALAG is approximately 4 minutes and 15 seconds.

Initiation of ALAG takes the system through the following series of tests:

1. **PreBoot Diagnostics** - Designed to perform a series of sequential tests of the components needed to Boot (load) other software or diagnostics routines from the rigid or floppy. PreBoot Diagnostics is initiated by the <Power On> or <B Reset> Switches.

The MP codes associated with PreBoot Diagnostics are from a blank MP to 0099, inclusive.

This diagnostic tests/checks:

- the portion of the IOP needed to continue the Boot process
- the IOP, MP LEDs and the MP Harness
- the Boot Selection Process (Boot Paths); if no <ALT B> selection, then software is loaded - otherwise
- the Load Device is tested
  - o If Rigid is selected <0001> ; checks IOP and Backplane Assembly
  - o If Floppy is selected <0002> ; checks IOP and Floppy Disk Drive

Failures during PreBoot Diagnostics should be recorded and NPSC should be called.

2. **Boot Diagnostics** - Provides a comprehensive set of tests for all hardware necessary to load the operational software, including the Real Time Clock. Boot Diagnostics can be loaded from rigid or floppy disk. The boot program is loaded by Pre-Boot Diagnostics and the MP codes associated with Boot Diagnostics are from 0300 to 0399, inclusive. This diagnostic tests/checks:

- The IOP, CP, HSIO, MCC, MSC, OPT, BACKPLANE and Real Time Clock
- The Ethernet connection (transceiver and cable)
- the System Configuration (memory, type of RAM chip, whether there is an OPT board and which rigid disk drive - 10, 29, 42, 80 or 300 Mb. This is set at test #316.
- the keyboard and mouse

Failures during Boot Diagnostics should be recorded and NPSC should be called.

**ERROR RECOVERY****8010 ALAG** cont'd

3. **Fault Analysis** - This test detects, isolates, and reports hard disk errors in the rigid disk drive and the rigid disk controller on the High Speed Input / Output (HSIO).

Failures during Fault Analysis should be recorded and NPSC should be called.

4. **Verify Physical Volume** - This test verifies the consistency of the Physical Volume. When no structural problems are found, this command normally will run almost instantaneously. If the Physical Volume is inconsistent, it will offer to scavenge the Physical Volume and ask the user for confirmation. It will display the message "**Physical Volume needs scavenging, Do you wish to scavenge the physical Volume (Y / N)**".

This procedure is of a risky nature, and it is recommended that the NPSC be contacted.

---

# PASSWORD ..... XEROX

## ERROR RECOVERY

### 6085 SYSTEM CONFIGURATION UTILITY

#### Background

The System Configuration Utility option resides on the ViewPoint Offline Diagnostics Disk. The configuration of the system is set at the time the rigid disk is formatted. Controlled parameters are set to identify the size of the rigid disk, specify the Model type, specify the amount of RAM and Virtual Memory of the system, etc.

The System Configuration Utility records a description of a particular system's configuration onto its processor, for use by the software.

#### When To Use The System Configuration Utility

- Upgrading components
- Installing a new system
- Installing a rigid disk
- Installing new options
- Installing additional memory

#### Accessing The System Configuration Utility

1. Insert the VP 1.1 Off-Line Diagnostics #1 diskette into the floppy drive and **reboot** the workstation. When the soft keys appear at the bottom of the screen, **press** the < F2 > key. The system will progress through a series of numbers, pausing momentarily at 0920 and then proceeding to a prompt requesting Offline Diagnostics #2 diskette be inserted. **Remove** the Offline Diagnostic #1 diskette from the floppy drive and **insert** the Offline Diagnostic #2 diskette.
2. When the message "**What class of user do you belong to**" appears on the display,
  - Normal User
  - System Administrator, or
  - Technical

**type** the number corresponding to Normal User and **press** the < RETURN > key.
3. A menu will appear, listing all of the available selections possible for the class of user you have indicated. Select from the menu, the option labeled, "**System Configuration Utility**" and **press** the < RETURN > key.

**ERROR RECOVERY****6085 SYSTEM CONFIGURATION UTILITY** cont'd

To check the system configuration:

- A. Select from this menu, the option labeled, "Show Configuration" and press the <RETURN> key.
- B. Select from the resulting menu "Return to Previous Menu" and press the <RETURN> key.
- C. Reboot the workstation and continue.

To change the system configuration:

- A. Select from this menu, the option labeled, "Set Configuration" and press the <RETURN> key.
- B. Make the changes to the system configuration as necessary.
- C. Select from this menu, the option labeled, "Return to Previous Menu" and press the <RETURN> key.
- D. Choose the option to "Show Configuration" and press the <RETURN> key or, Reboot the workstation and continue.

To abort working with the system configuration:

- A. Select from this menu, the option labeled, "Return to Previous Menu" and press the <RETURN> key.
- B. Reboot the workstation and continue.

**DIAGNOSTICS****DIAGNOSTICS GLOSSARY****Backing Store**

The disk location where the system stores data files temporarily, until permanently stored by the user. This location is in the Scavenger Volume on ViewPoint workstations or the User Volume on OS workstations.

**Bad Page Table**

The Bad Page Table is created when the rigid disk is formatted. It contains pages entered by the manufacturer or by the user.

**Bit**

Stands for "Binary Digit", which is the smallest unit of information recognized by a computer, and is represented by a 1 (one) or 0 (zero).

**Byte**

A byte is a set of varying contiguous bits arranging from 5-10 bits, which represent a character, symbol, or operation. Xerox uses an 8 bit structure.

**CP**

Stands for Central Processor. The CP PWA (Printed Wiring Assembly) resides in slot 3 of the 8000 processor.

**CRC**

Stands for Cyclic Redundancy Check, and is a numeric field written on the media and representative of the actual bits contained in the data field. When the data is read back, a CRC is calculated and compared to the CRC stored on the disk. If the two are unequal, the data is in question, and an error is normally posted.

**Data Field**

A field written with each sector of the disk describing the client data (user data, system software, etc.).

**DCM**

Stands for Display Control and Memory. The DCM PWA (Printed Wiring Assembly) resides in slot 1 of the 6085 processor.

## DIAGNOSTICS

### DIAGNOSTICS GLOSSARY cont'd

#### **Destructive Exerciser**

The Destructive Exerciser command overwrites the entire disk. It is an exerciser program for detecting intermittent disk errors. It consists of random seeks, and writes and reads random data patterns.

#### **Disk Exerciser**

This command is a non-destructive exerciser that reads from random locations, and writes and reads on the diagnostic cylinder. It detects intermittent disk errors, but does not perform any fault isolation. This exerciser program outputs its results in the form of an error log. Each pass consists of a series of reads to random disk locations interspersed with non-destructive writes and reads on the diagnostics cylinder.

#### **Fault Analysis**

This command detects, isolates, and reports hard disk errors in the rigid disk drive and the rigid disk controller on the HSIO PWA.

#### **File Check**

File Check is a Pilot Logical Volume scavenger and Client File System scavenger for the User Volume on workstations running ViewPoint and OS Software. (For servers the Scavenger utility is used.) File Check does the following:

1. Pilot Logical Volume Scavenger

- Reconstructs the Pilot file system using the labels of each page as the truth. (Assumes there are no label errors. If label error does exist, file cannot be reconstructed accurately.)
- Reads each sector and reconstructs the Logical Volume root page and accelerator files. (Root page and accelerator files can be considered pointers to actual location or layout of all other files.)

2. Client File System Scavenger

- Identifies problems in client files, and reports them to the client.
- Reconstructs directory system (hierarchy of files). (Which documents belong in which file folders.)
- Repairs damaged files in User Area, if possible; otherwise, it deletes them.

---

**PASSWORD** ..... XEROX

## REPARTITIONING 6085 WORKSTATIONS

### **Explanation:**

When an Emulated Fixed Disk is partitioned, the pages specified are PHYSICALLY allocated. The data on the EFD is then stored locally on these physically allocated pages. Thus, when a desktop is moved to the File Service, the data stored on the EFD remains local and is NOT moved to the File Service with the rest of the desktop data.

### **Solution:**

If repartitioning the 6085 workstation needs to be done for any reason, customer with an Emulated Fixed Disk MUST first use the DOS BACKUP command to backup the data from the EFD to floppy. After repartitioning and reinstalling workstation software, the user must be sure to repartition the new EFD for the same amount of pages as before. If they partition for less, there is a chance that the new EFD will not have enough pages when the DOS RESTORE command is used to recover the data.

**ERRORS IN MS-DOS USER'S GUIDE**

Please be aware that the VP 1.1 MS-DOS User's Guide for the 6085's direction for:

Partitioning a never partitioned emulated fixed disk,  
Repartitioning an emulated fixed disk and  
Configuring PC and installing MS DOS

are incorrect and will not work.

Figure 1 below shows where in the User's Guide the errors can be found, and the corrected steps the users should follow.

Figure 1

Location of Incorrect Text	Correction
Step 4, pg 3-12, in the section named "partitioning a never partitioned emulated fixed disk"	Should read: Select (MS-DOS) for all of the options, (do not select NONE)
Step 8, pg 3-13, in the section named "Repartitioning an emulated fixed disk"	Should read: Select (MS-DOS) for all of the options, (do not select NONE)
Step 6, 7 and 8 on pages 3-14 through 3-15, in the section named "Configuring your PC and installing MS-DOS."	OMIT STEPS 6,7 & 8. Go directly to Step 9, pages 3-16

---

<b>PASSWORD</b> ..... XEROX
-----------------------------

**READ/WRITE - READ ONLY TRIDENT SWITCH**

The Read/Write - Read only switch on a trident must ALWAYS be set to READ/WRITE.

Previous documentation may exist which indicates that the READ ONLY switch may be used to prevent users from writing to the pack. The Operating System, however, will not function unless it is in the READ/WRITE position.

**UPGRADING AUXILIARY PACKS**

Customers should be reminded that whenever multi-drive servers are upgraded to Services 10.0, auxiliary packs containing services software should be upgraded to Services 10.0 as well. Customers often have services software installed on auxiliary packs so that if the primary pack becomes unavailable, the auxiliary drive can be booted.

If the primary pack is upgraded to Services 10.0 and the auxiliary pack(s) are not, customers may experience problems in the future. An auxiliary 8.0 services pack that is booted after having upgraded the file system to a 10.0 file system will request a scavenge. The system will do a Services 8.0 scavenge which will damage the 10.0 file system and cause a loss of data.

---

**PASSWORD** ..... XEROX

**FILE SERVICE BACK-UP RESTORE WARNINGS**

A volume being restored to an empty volume or to a copy of the original volume should not be made accessible to the user community during the restoration process. This includes use by local applications (other services) as well as remote users. A System Administrator should not online the volume (via 'Online Volume') until the 'Restore File System' has completed in these cases. If this procedure is not followed, the integrity of the restore procedure is not guaranteed.

The volume backup data sorted in the backup file drawer should not be tampered with using ViewPoint software or any software other than the File Service 'Backup' and 'Restore' commands. Such tampering can render the backup data useless.

---

# PASSWORD ..... XEROX

## TIME DISCREPANCIES ON AN INTERNET

I am sure everyone is aware of the importance of keeping times accurate between networks, and the potential problems that it can cause.

When checking time between networks one thing that is often overlooked is the offset from Greenwich mean time... ie. -5 for EST. An improper entry here will cause an error of not just a few minutes, but HOURS. Here is a little tip for checking to see what Greenwich mean offset was entered when the time was set on a network.

Each server has a boot file with it's creation date and TIME appended to it, which remains constant for each release.

### THE DATE AND TIME ARE DIFFERENT FOR FIXED AND REMOVABLE DISK SERVICES.

<b>SERVICES 10.0</b>	
FIXED	3-SEP-86 15:04:37 PST
REMOVABLE	3-SEP-86 15:28:30 PST

Note that the times are in Pacific Standard Time, which is logical seeing as the file were created in California. When the release level, date and time are displayed on your network, the time will be out by the difference in the Greenwich mean offset that was entered when time was set.

**\*\* example:** on a 42 meg server in the EST zone which is -5 would be 18:04:37 instead if 15:04:37. There is a three hour discrepancy which is correct. EST is -8.5 from Greenwich and PST is -8.

# PASSWORD

XEROX

## TIME DISCREPANCIES ON AN INTERNET cont'd

There are two ways to get a server to display this time;

1. boot the server
2. open a remote system administration window ( this is probably the easiest) the first message received from the server contains the software version with its it'screation date and time,see example below;

```
2-852-132-506 Close Show Next Show Previous Make Document
KBD
On Line Local Locked Record
● ○ ○ ●

Series 8000 Network Services Executive. Version 10.0 of 3-Sep-86 18:04:37
Copyright (C) 1981, 1982, 1983, 1984, 1985, 1986 by Xerox Corporation
All rights reserved. Server Name: 2-852-132-506:TOR HD:XCI
>List Services
Series 8000 Network Services. Version 10.0
Network: 4-097, Processor: 2-852-132-506
Server Name: 2-852-132-506:TOR HD:XCI
Installed services: Internetwork Routing Service, Print Service, Test
Activated services: Print Service, Internetwork Routing Service

Print Service: PS at Telemarketing Status: Started
Internetwork Routing Service: IRS at 10G Status: Started
>_
```

Page 2 of 2

**PASSWORD** .....

**XEROX**

**TECHNICAL BULLETIN DISTRIBUTION CHANGE REQUEST**  
(Please PRINT All Entries On this Form)

Network Number: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Location Code: \_\_\_\_\_ Telephone: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, Country: \_\_\_\_\_

**COMMENTS ON PASSWORD**

How relevant was the information?

\_\_\_\_\_

Your comments on the overall content of the Bulletin would be appreciated .

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please send to:

Manager, Support Services Operations  
National Product Support Centre  
Xerox Canada Inc.  
3000 Steeles Avenue East, 4th Floor  
Markham, Ontario  
L3R 4T9