

# **Xerox Network Services**

## **Network Administration Library**

### **Fault Isolation Process**

### **Basic Network Troubleshooting**

# **Network Administration Library**

## **Basic Network Troubleshooting: Fault Isolation Process**

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# 1.

# Introduction

*Fault Isolation Process* contains Routine Analysis Processes (RAPs) you use to isolate and solve problems with your network.

As System Administrator, you use this book to solve problems that may occur while performing a task at a server, at a workstation using Remote System Administration, or at a workstation accessing network services. This book does not provide solutions for problems occurring as a result of operating application software at a workstation or personal computer. Refer to the workstation documentation or user manuals for assistance.

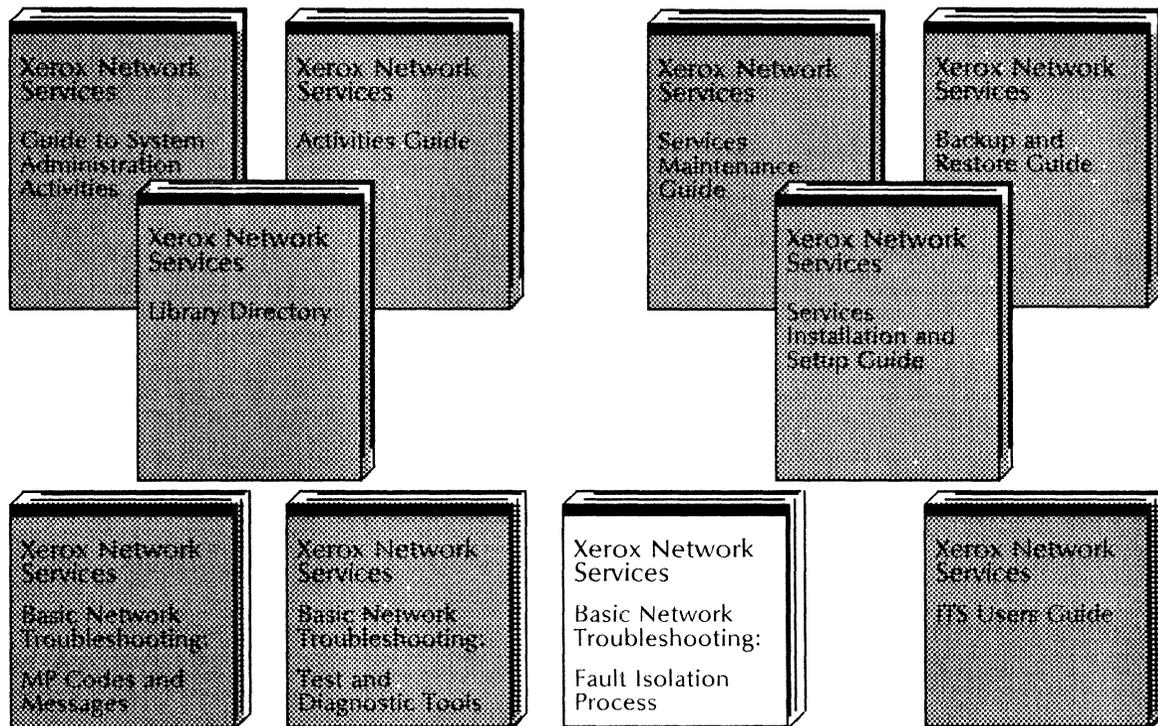
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## Network Administration Library organization

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*Fault Isolation Process* is one of the three troubleshooting books that make up *Basic Network Troubleshooting* in the Network Administration Library, as shown in Figure 1-1.

Figure 1-1. Network Administration Library organization



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## Basic network troubleshooting

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*Basic Network Troubleshooting* consists of three books:

- *MP Codes and Messages*
- *Fault Isolation Process*
- *Test and Diagnostic Tools*

These books are designed to help you:

- identify and locate a network services problem
- clearly describe the problem
- solve the problem
- prepare to contact Service or the Systems Customer Support Center

## Identifying a problem

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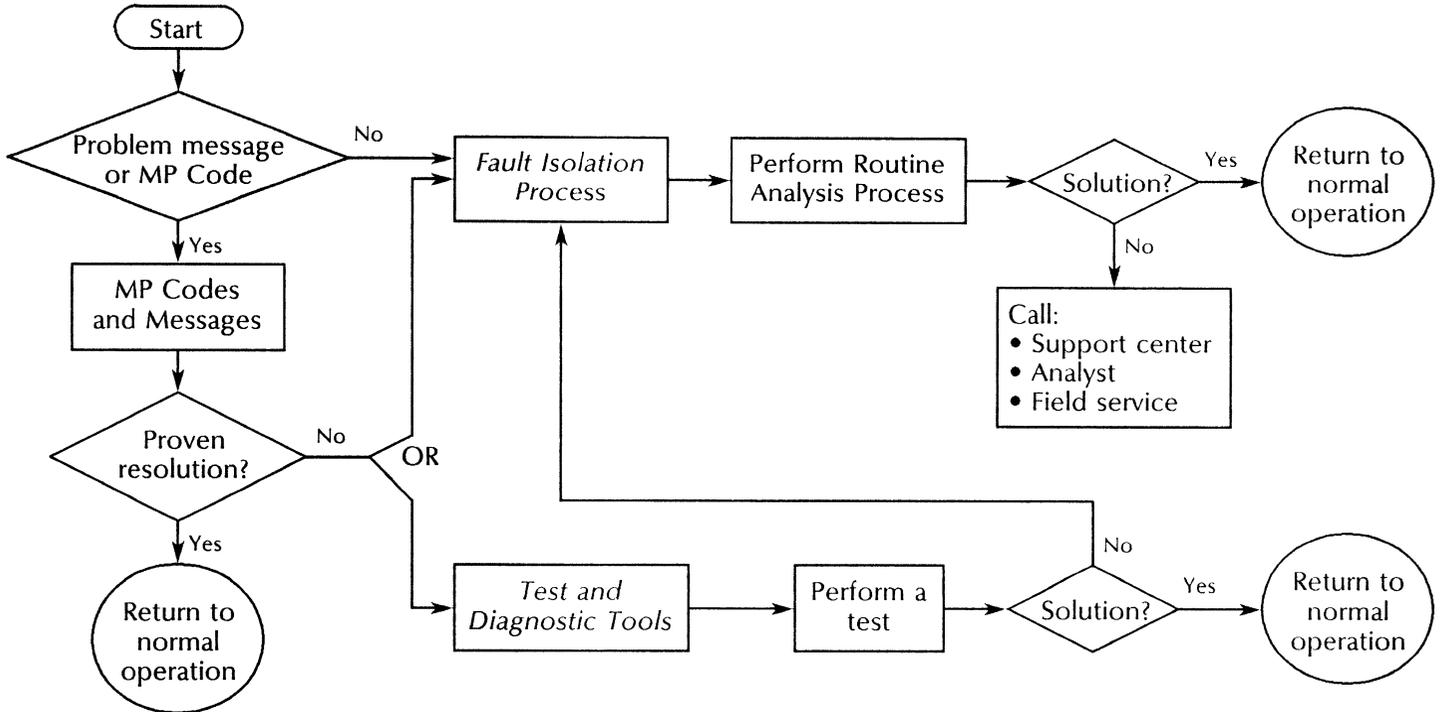
As System Administrator, your tasks include identifying a problem, locating its source, solving the problem, and keeping clear and accurate records of both the problem and the solution. To identify a problem, you first analyze its indicators or symptoms. There are three types of indicators:

- Maintenance panel codes
- Problem messages
- Task non-performance

Maintenance panel codes and problem messages may include symptoms of task non-performance.

Figure 1-2 shows the basic strategies you can use to research a problem. You can research each problem message and MP code in *MP Codes and Messages*. The listing in *MP Codes and Messages* always directs you to a solution. You may need to use both *Fault Isolation Process* and *Test and Diagnostic Tools* to further pinpoint and solve the problem.

Figure 1-2. Basic research strategies



You may find evidence of one or more problem indicators. You need to record and analyze all indicators to solve the problem. It is possible that an error message may appear even though the task was performed. Or, the task was not performed and a message does not appear to indicate this.

As you identify the problem, it is important that you record all indicators on the Problem Report Form. This form is located in the *Guide to System Administration Activities*. Make copies of the Problem Report Form and record any difficulties with the network that require research. Store the completed Problem Report Forms in the *Activities Guide*. The completed forms create a permanent record of the operational history of your system.

### **Problem messages**

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Problem messages may display on the server terminal, banner sheet, or 6085/8010 workstation.

Messages that display at the server terminal describe network hardware and software problems. Messages that appear on a banner sheet describe problems in printing a document. Messages that display at a workstation may describe problems related to the workstation's interaction with network services, ViewPoint or other software, and the workstation hardware.

When you receive a problem message, always refer to *MP Codes and Messages* first. Do not refer to *Fault Isolation Process* or *Test and Diagnostic Tools* unless you are directed to do so.

## **Maintenance panel codes**

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MP codes display on the maintenance panel located at the front of the server and indicate hardware operation. They can indicate normal operation, pinpoint a hardware problem, or identify the diagnostics test that is running.

Always research an MP code in *MP Codes and Messages*. You will be directed to a solution, which may include calling Service or the Systems Customer Support Center.

## **Task non-performance**

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Since you may not see actual evidence of task non-performance, your records should include a complete description of the circumstances surrounding the attempted task. Specifically, list what you tried to do and how the task failed.

## **Solving a problem**

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After you have identified a problem, you need to find the most direct solution.

If an MP code or problem message displays on the server maintenance panel or terminal, refer to its listing in *MP Codes and Messages*, and perform the steps described.

If the recommended actions do not solve the problem, you may be directed to conduct a test in *Test and Diagnostic Tools* or perform further research in this book.

*Test and Diagnostic Tools* includes procedures for diagnosing a problem and for recovery. Test results are a valuable source of information and may provide additional problem indicators. Based on the results, you may be directed to perform a Routine Analysis Process (RAP) in this book. Be sure to record all results on the Problem Report Form.

This book provides general and specific techniques to isolating a problem based on symptoms you observe and other diagnostic findings. Always record the problem, the actions taken, and the results on the Problem Report Form.

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## Documentation conventions

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These conventions may be used in this book to help you recognize information.

 This symbol means “press RETURN.” When you see it after a procedural step, press the RETURN key on the terminal keyboard.

**BREAK** Words appearing in all capital letters represent the keys or switches on your equipment.

< service name > Words appearing in angled brackets represent system-supplied information.



**WARNING:** Warnings appear immediately before any action that may be physically harmful to you or your equipment. Make sure you understand the warning before you perform the action.



**CAUTION:** Cautions appear immediately before any action that may destroy the data stored on your network. Make sure you understand the potential impact of the action before you perform it.



Notes are helpful hints that help you perform a task or understand the text.



This symbol means that you can perform the procedure from a workstation using Remote System Administration (RSA). If you need to record any information while performing the procedure, you can use the Make Document or Make Screen feature.



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## 2.

## Entry Level

This chapter describes the fault isolation process and contains the entry level Routine Analysis Processes (RAPs) you perform to determine if your problem is related to hardware components, or to your service or communication software.

Refer to this book only when all other troubleshooting efforts have failed or when you have been directed to it as a result of a test you conducted in *Test and Diagnostic Tools* or an action you performed in *MP Codes and Messages*.

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### The fault isolation process

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The fault isolation process begins when you experience a problem with the network, its hardware components or services.

Follow this troubleshooting approach to identify and resolve the problem:

- Make a copy of the Problem Report Form located in the *Guide to System Administration Activities*. Use this form to describe the problem, record the problem indicators, and list the recovery actions you take.
- Perform the steps listed in this chapter to determine if your problem is related to hardware components, or is related to services or communication software. This chapter provides immediate solutions to the most basic problems or directs you to another chapter of this book.
- Based on your findings, perform the solution provided in this chapter or go to the chapter containing the appropriate RAP.
- Review the table at the front of each chapter to identify the problem and the line location number of the recommended RAP.
- Locate the RAP and perform the steps in the order shown. Record the results of any action you take on the Problem Report Form.

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## Performing a RAP

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The Routine Analysis Process (RAP) systematically checks and verifies that the elements required to perform a network operation are in place. The RAPs may not resolve the problem occurring on your network. However, following the steps allows you to conduct a preliminary fact-finding process which assists Xerox personnel and lessens the time required to isolate the problem.

To perform a RAP, just follow each step and answer the question that follows. During the analysis, you may discover a problem, correct it, and then retry the failed operation.

If the operation still fails, you should return to the next line in the RAP and continue the process. Always record the actions you take and their results (successful and unsuccessful) on your Problem Report Form. If you cannot resolve the problem after performing all steps in the RAP, you are directed to call the Systems Customer Support Center or your local Xerox Service Representative for assistance. The information you record on the Problem Report Form speeds the analysis of your problem.

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## The Problem Report Form

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Use the Problem Report Form to record all problem indicators. Indicators may include messages, MP code numbers, or evidence of task non-performance. Also record the steps you took to isolate the problem and the results of your actions.

The Problem Report Form serves two purposes:

- Some recovery actions require that you call your local Service Representative or the Systems Customer Support Center. The information recorded on the Problem Report Form allows you to respond to questions they ask in their fault isolation process.
- The information on the form serves as a log of the problem indicators and recovery actions required to restore your server to a operational status.

The history assists your Xerox Service Representative or the Systems Customer Support Center in determining whether to replace a server component or to re-install software.

## Filling out the form

---

Make a copy of the Problem Report form. Fill out the form before you call the Systems Customer Support Center. This following information describes the form:

- ① Use section ① on the Problem Report Form to enter information related to your installation. If you need to call the Systems Customer Support Center, the Xerox Customer Support Representative will provide you with the assigned SCSC log number. Record the number in this section.
- ② Use section ② to record the description of your server. You can obtain most of this information from the Services Installation Worksheet. You filled out this worksheet in the Services System Software chapter of the *Guide to System Administration Activities*.
- ③ Use section ③ to describe the network or services problem you are experiencing. This shortens the amount of time it takes to resolve the problem when you talk to the Systems Customer Support Center.
- ④ Use section ④ to list the maintenance panel codes, server messages, and task non-performance indicators that may have occurred in conjunction with the problem.
- ⑤ Use section ⑤ to record the tests you performed while attempting to isolate, research, or fix the problem. Be sure to note the test indicators in the "Results" section. You need this information when you talk to the Systems Customer Support Center.
- ⑥ Use section ⑥ to record the final solution to your problem. Be as specific as possible. This becomes a permanent record of your network's performance and may provide

valuable clues for future troubleshooting. Store your completed Problem Report Forms in the *Activities Guide*.

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## How to use the entry RAPs

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The entry to routine analysis contains a preliminary analysis to isolate the problem to a specific hardware component and a routine analysis to determine if all software prerequisites were met.

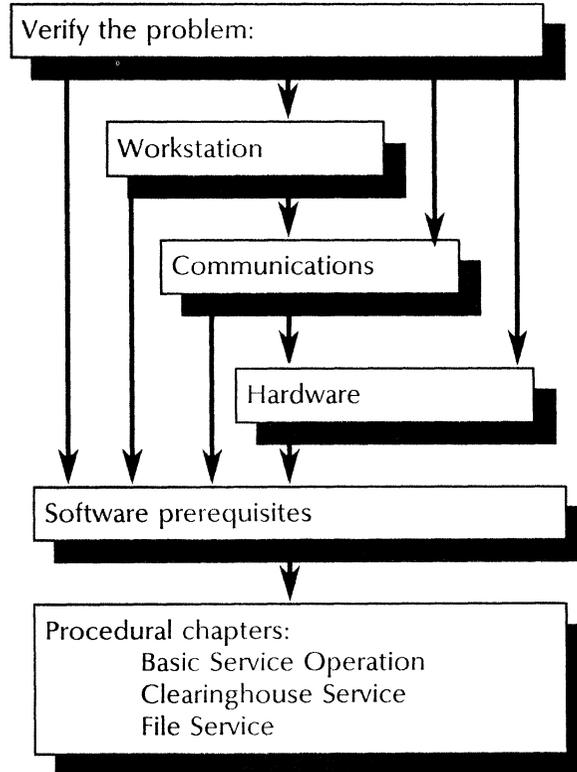
**Preliminary analysis** This section verifies that a problem exists and assists you in determining if the problem is caused by a workstation, internetwork communications, or other hardware component.

If you are not sure which network element is the cause of the failure, start at line 2-100 and follow the process until you are directed to another chapter in this book or to another book in *Basic Network Troubleshooting*. If you are sure of the network element, perform steps 2-100 through 2-130 to verify the problem; then go directly to the workstation, communication interface, or hardware section. Figure 2-1 provides an overview of the entry level process.

**Software prerequisites**

If you suspect a software failure, perform this initial analysis to review the software prerequisites; then continue your troubleshooting activities.

Figure 2-1. Entry level overview



## Preliminary analysis

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Follow this preliminary analysis to verify the problem and isolate it to a specific network component:

### 2-100 Verifying the problem

---

**2-110** Check the maintenance panel at the workstation or server.

Does the maintenance panel show MP code 8000?

**Y** ↓    **N** → Look up the MP code in *MP Codes and Messages* and perform the recommended recovery action. If the recovery does not resolve the problem, return to this section and continue with the next line.

**2-120** Use the appropriate documentation and follow the steps to retry the operation.

Can you recreate the problem?

**Y** ↓    **N** → Consider the problem an intermittent failure. Record the incident on the Problem Report Form for future reference.

Record all error messages and MP codes on the Problem Report Form. Look up the codes or messages in *MP Codes and Messages* and perform the recommended recovery action. If the recovery does not resolve the problem, return to this section and continue with the next line.

**2-130** Review the Notes and Cautions included with your workstation or services software documentation.

Does a note or caution exist for the operation you are trying to perform?

**Y** ↓    **N** →    **Skip to 2-200** to verify the workstation operation.

**2-140** Perform the recommended recovery action and retry the operation.

### **2-200 Workstation verification**

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**2-210** Identify the workstation, server, and service required to perform the operation. Record the information on the Problem Report Form.

**2-220** Retry the operation from another workstation that uses the same cabling to access the network. Refer to your network site plan and to verify the Ethernet cable layout.

**2-230** Can you recreate the failure using another workstation?

**Y** ↓    **N** →    Refer to the appropriate documentation to verify the operation of the original workstation.

**2-240** **Continue with 2-300** to verify the workstation's physical connection to the network.

### **2-300 Internetwork communications**

---

**2-310** Use the "Testing an internetwork communications path" procedure in the *Test and Diagnostic Tools* book to verify the physical connection.

**2-320** Was the test successful?

**Y** ↓    **N** →    Does the failure involve network citizens on the same network?

**Y ↓    N →    Skip to 2-350** to verify the remote IRS connection.

Verify the Ethernet connections. Call your local service organization for assistance if required.

**2-330** Does the operation require asynchronous, bisynchronous, or autodialing?

**Y ↓    N →    Skip to 2-500** to continue the preliminary analysis.

**2-340** Proceed to the Basic Communication chapter in this book to continue the analysis.

**2-350** Use the “Testing an RS232C port” procedure in *Test and Diagnostic Tools* on the server running the IRS software to verify the port operation.

**2-360** Was the test successful?

**Y ↓    N →** Check the Internetwork Routing Worksheet to ensure circuit registration. You should also check the External Communication Worksheet to verify the RS232C port configuration. If a modem is being used, refer to the manufacturer’s documentation to ensure its proper set up and operation.

**2-370** Have the System Administrator at the remote location verify the RS232C port on the remote server.

**2-380** Was the test successful?

**Y ↓    N →** Have the System Administrator at the remote server continue the analysis.

**2-390** **Skip to 2-500** to continue the preliminary analysis.

**2-500 Hardware verification**

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**2-510** Ensure that the required hardware is installed. See “Planning for installation” in the appropriate service chapter of the *Guide to System Administration Activities* for more information.

Is the hardware installed?

**Y** ↓    **N** → See the Hardware chapter in this book to further isolate hardware-related problems.

**2-520** Ensure that the required hardware is operational. See Appendix A, Hardware maintenance in the *Services Maintenance Guide*.

Is the hardware operational?

**Y** ↓    **N** → See the Hardware chapter in this book to further isolate hardware-related problems.

**2-530** Are the floppy or cartridge tape drives operating properly?

**Y** ↓    **N** → See the Hardware chapter in this book to further isolate hardware-related problems.

**2-540** Go to the server that has the service you trying to use and type **List Services**.

**2-550** Is the service you are trying to use started?

**Y** ↓    **N** → Start the service and retry the operation.

**2-560** Can you start the service?

**Y ↓**    **N →**    Go to the Hardware chapter in this book to verify the server operation.

**2-570**    **Continue with 2-1020** to determine if all basic software prerequisites are met.

## Software prerequisites

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Follow this preliminary analysis to determine whether the basic software prerequisites are met:

**2-1000**    Use the **List Services** command to ensure that the system and service software are installed and running on the server.

Is the software installed?

**Y ↓**    **N →**    Perform the appropriate procedures in the Server Software Installation chapter of the *Services Installation and Setup Guide* to install, activate, and run the software.

Is the software running?

**Y ↓**    **N →**    Activate the service using the “Activating and deactivating services” procedure in the Server Software Installation chapter of the *Services Installation and Setup Guide*.

**2-1010**    Perform the “Showing domains” procedure to ensure that the Clearinghouse is available. See the Clearinghouse Service chapter in the *Services Maintenance Guide*.

Is the Clearinghouse up?

**Y ↓**    **N →**    Try the operation again later. If the Clearinghouse continues to be down, see the Clearinghouse Service chapter in this book for more information.

**2-1020** Use the **List Files** command to ensure that the required service files are installed. Table 2-1 shows the required service software files for the External Communication Service, the Clearinghouse Service, and the File Service. For other service software requirements, refer to the appropriate service chapter of the *Guide to System Administration Activities*.

Are all the required service files installed?

**Y** ↓    **N** → Use the Server Software Installation chapter in the *Services Installation and Setup Guide* to reinstall, activate, and run the required software.

Table 2-1. **Required service software files**

External Communication Service	Clearinghouse Service	File Service
ExternalCommunicationSDF.bcd ECServiceConfig.bcd GreeterConfig.bcd CommSvcComSoft.bcd CommunicationServicesArea.messages RS232CCommon.bcd ExternalCommunicationService.messages TTYGreeter.messages	ClearinghouseSDF.bcd CHSAnnouncer.bcd ClearinghouseService.messages DistSvcConfig.bcd	FileSDF.bcd FileServiceConfig.bcd FSCommonConfig.bcd FileService.messages FSCommon.messages

**2-1030** Ensure that you are in the proper service context and logged on status required to perform the procedure.

Are you in the proper logged on status and service context?

**Y** ↓    **N** → Return to the step-by-step procedure you were performing. Try the procedure again with the proper logged on status and service context.

**2-1040** Ensure that you were following each step of the procedure.

Were you following the procedure steps sequentially?

**Y** ↓    **N** → Try the procedure again, following each step exactly as written.

**2-1050** Ensure that during the operation, you referred to *MP Codes and Messages* for each error message or MP code that displayed.

Did you refer to *MP Codes and Messages* to correct the problem?

**Y** ↓    **N** → Record the error message or MP code on the Problem Report Form. Follow the recommended action(s) in *MP Codes and Messages* to correct the problem.

**2-1060** Use the **Show Time** command at the server to check the time. Then, check the time at the workstation.

Are the server time and workstation time the same?

**Y** ↓    **N** → 1) Reset the time using the "Setting time" procedure in the Services System Software chapter of the *Services Maintenance Guide*.

2) Reboot the workstation.

**2-1070** Try the operation again. If the operation fails, see the appropriate service chapter for the specific RAP to correct your problem.



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## 3.

## Hardware

This chapter contains the Routine Analysis Processes (RAPs) you use to isolate and solve hardware problems with your 8000 or 8090 server, high capacity drives, cartridge tapes, or floppy disks.

Make sure you meet these prerequisites before you perform any RAPs in this chapter:

- You have identified a problem with a hardware component. See the section called "Preliminary analysis" in the Entry Level chapter to perform your initial analysis.
- You have recorded the details of the problem on a copy of the Problem Report Form.
- You have reviewed the hardware procedures in Appendix A, Server maintenance, in the *Services Maintenance Guide*.

RAPs provide steps to isolate the problem and instructions for immediate recovery where possible. Based on your analysis, you may be directed to continue the troubleshooting process in one of the following chapters or books:

- Another chapter in this book if a problem exists with a network service.
- *MP Codes and Messages* if the RAPs produce a problem message or maintenance panel code.
- *Test and Diagnostics* if the RAPs indicate problems you can solve diagnostically or that require further analysis.

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## Hardware problems

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If you have been directed to this chapter from the Entry Level chapter, you have a good idea which hardware component is causing the problem. Use Table 3-1 to determine the Routine Analysis Process to use to continue troubleshooting:

Table 3-1. **Possible hardware problems**

Problem	Location	Problem	Location
Using a server or high capacity drive	3-100	Reading or writing a floppy disk	3-400
Reading or writing a High Capacity or cartridge tape	3-300		

## Server qualification

---

Use this section to determine whether the 8000 or 8090 server, or a high capacity drive is the cause of a hardware failure. See Appendix A, *Server maintenance*, in the *Services Maintenance Guide* for more information regarding these hardware components.

The troubleshooting approach for the 8000/8090 server and the high capacity drive have been combined in the following RAP. When you are directed to perform a test or diagnostic procedure described in *Test and Diagnostic Tools* be sure to use the appropriate procedure for the component you are troubleshooting.

Follow these steps to troubleshoot the 8000 or 8090 server or high capacity drive:

- 3-100** Check the off/on switch or the start/stop switch to ensure that the drive is in the on or start position.

Is the drive switch in the on or start position?

**Y** ↓    **N** → Turn the switch on and retry the operation.

- 3-120** Observe the physical indicators to ensure that the component is receiving electrical power. The indicators you may be able to check include the power switch indicators, the drive fans, and the LEDs on the maintenance panel.

Are the physical indicators operating?

**Y** ↓    **N** → Connect any other electrical component into the same electrical outlet.

Does the new component receive power from the electrical outlet?

**Y ↓    N →** Have an electrician check the electrical circuits in your facility.  
Call your local Xerox Service.

**3-130** Reboot the server.

Is the problem resolved?

**Y ↓    N →** **Continue with 3-140.**

Continue with normal operation.

**3-140** Insert the floppy disk or cartridge tape containing diagnostics and boot the server from MP code 0005.

Did you receive an MP code or message at the completion of boot diagnostics?

**Y ↓    N →** **Skip to 3-180.**

**3-150** Record the message or MP code. Locate the message or MP Code in *MP Codes and Messages* and perform the recommended actions.

**Y ↓    N →** **Continue with 3-160.**

Continue with normal operation.

**3-160** Reboot the server from MP code 0001; then **continue with 3-170.**

**3-170** Using Remote System Administration, use the **Show Backstop Log** command to display the server's Backstop Log.

**3-180** Record the data from the Backstop Log on the Problem Report Form or use the Remote System Administration's Make Document or Make Screen feature.



If you are not familiar with the various fields of the Backstop Log, go to the section “Recording Backstop Log data” later in this chapter for more information. **Continue with 3-190** after you record the data.

**3-190** Is the problem occurring on a large capacity drive (300 Mb) or high capacity drive?

**Y** ↓    **N** →    **Skip to 3-250.**

**3-200** Run the confidence test as described in the offline diagnostics chapter of *Test and Diagnostics Tools*.



Use the procedure designated for the component you are troubleshooting.

**3-210** Did the confidence test complete without showing a MP code?

**Y** ↓    **N** →    Go to *MP Codes and Messages* and perform the recommended recovery action.

**3-220** Run the “Verifying a disk surface” procedure in the offline diagnostics chapter of *Test and Diagnostics Tools*.



Use the procedure designated for the component you are troubleshooting.

**3-230** For medium capacity drives, perform the “Running the Media Scan test” procedure in the *Test and Diagnostics Tools*.

**3-240** Perform the “Listing bad pages” procedure in *Test and Diagnostics Tools*.

**3-250** Does the test show new or unidentified bad pages?

Y ↓    N →    This preliminary RAP indicates the problem may be due to the software installed on the server. Return to the “Software prerequisites” section in the Entry Level chapter to isolate the software problem.

**3-260** Record the bad pages on the Problem Report Form and call the Systems Customer Support Center for assistance.



If there are numerous bad pages, part of the list may scroll off of the screen. Call the Systems Customer Support Center for assistance.

## Recording Backstop Log data

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The backstop software is installed on the server’s backstop volume during the installation of Services System Software. When a software program fails, the Backstop software records specific data related to the failure and automatically reboots the server to continue operation.

The data recorded in the Backstop Log is used by Xerox personnel to debug the software. Although as a System Administrator, you do not have the tools required to interpret and debug the software, the following is a description of the type of information shown on the Backstop Log:

- Date** This is the date and time the backstop entry was made.
- Reason** Provides a reason for the failure. The first part of this field is the entry reason, which may be one of the following:
- Uncaught Signal
  - DirectCall (Runtime.CALLDebugger)
  - Interrupt
  - AddressFault

Figure 3-1. Sample Backstop Log

```
23-Mar-88 19:33:45  reason: uncaught signal,  pc: 1732B
gf: 140750B,  module name: BackstopTestImpl
signal: 140760B = > [gf: BackstopTestOldPrincOpsImpl, index: 0],  msg: 13631B
eval stack: 072145, 000002, 140760, 000000, 020224, 000000, 062371, 000020, 062222, 000020, 000000, 000062,
132670, 000001
```

WriteProtectFault  
Bug  
Other

- PC** This field is called the byte PC and points to a line of code accessible only to Xerox personnel.
- GF** This field is the GF or global frame handle. This global frame handle provides the address of the data associated with the module.

**Module Name** This field provides the name of the module that caused the backstop entry.

Additional information may follow these categories. When you are directed to record the Backstop Log data, ensure that you record all of the information. If there are numerous entries, you can use the Make Screen or Make Document feature when accessing the log through Remote System Administration. See the *Guide to System Administration Activities* for more information.

## Cannot read or write to a floppy disk

---

- 3-300** Is the disk inserted correctly?  
**Y** ↓    **N** → See Appendix A, Hardware maintenance in the *Services Maintenance Guide* for the correct procedure.
- 3-310** Perform the “Testing the floppy disk drive” procedure in *Test and Diagnostic Tools*.  
Was the test successful?  
**Y** ↓    **N** → Perform the “Displaying the Error Log” procedure in *Test and Diagnostic Tools*. Record the data.
- 3-320** Clean the read/write heads of the floppy drive using the cleaning kit supplied by Xerox. Then retry the operation.
- 3-330** Was the operation successful?  
**Y** ↓    **N** → Call Service for assistance.
- 3-340** If you are trying to read a floppy disk supplied by Xerox, contact your Xerox Analyst to obtain another floppy disk.
- 3-350** If you are trying to read a floppy created at your site, contact your Analyst for assistance.
- 3-360** If you are trying to write to a floppy disk, is the write enable sticker applied to this disk?  
**Y** ↓    **N** → Apply an adhesive sticker to the small notch at the bottom of the disk. See Appendix A, Hardware maintenance in the *Services Maintenance Guide* for more details. Then retry the operation.

**3-370** Is the floppy disk properly formatted?

**Y ↓**    **N →**    Use the "Formatting a floppy disk" procedure in *Test and Diagnostic Tools* to format the floppy disk and retry the operation.

**3-380** Was the operation successful?

**Y ↓**    **N →**    Replace the floppy and retry the operation.

Was the operation a success?

**Y ↓**    **N →**    **Skip to 3-480.**

**3-390** Troubleshooting complete.

**3-400** Perform the "Exercising the floppy unit" procedure in *Test and Diagnostic Tools*.

**3-401** Was the test successful?

**Y ↓**    **N →**    Record the MP code on the Problem Report Form.

Perform the "Displaying the Error Log" procedure in *Test and Diagnostic Tools*. Record the summary log information on the Problem Report Form.

Go to the MP Codes chapter of *MP Codes and Messages* to perform the prescribed action.

**3-402** Call your local Xerox Service for assistance.

## Cannot read or write to a cartridge tape or a high capacity cartridge tape

---

**3-500** Are you trying to write to a cartridge tape or high capacity cartridge tape?

**Y** ↓    **N** →    **Skip to line 3-503.**

**3-501** Are you using a preformatted tape?

**Y** ↓    **N** →    Perform the “Formatting a cartridge tape” procedure or the “Initializing a high capacity cartridge tape” procedure as described in *Test and Diagnostic Tools*.



You can purchase preformatted tapes directly from Xerox. Ask your Xerox Representative for the toll-free number.

**3-502** Is the tape you are trying to use write-enabled?

**Y** ↓    **N** →    Turn the arrow so it points opposite the word SAFE and retry the operation.

**3-503** Insert the cartridge tape you are trying to use into the drive. Use the procedure described in Appendix A, Server maintenance, in the *Services Maintenance Guide*.

**Y** ↓    **N** →

**3-504** Did the tape lock into position?

**Y** ↓    **N** →    If you are inserting a cartridge tape, reinsert the tape making sure the secure arm locks it into position.

If you are inserting a high capacity cartridge tape, reinsert the tape making sure it locks into position and you can fully close the tape drive door.

**3-505** Are you able to lock the tape into position?

**Y** ↓    **N** → Record your observation on the Problem Report Form and call Service.

**3-506** Did the drive perform the retentioning routine?

**Y** ↓    **N** → If you are using a cartridge tape, retensioning should occur automatically. If it does not, record your observation on the Problem Report Form and call Service.

If you are using a high capacity cartridge tape, press the Load button to prepare the tape for use. If you still cannot use the tape, record your observation on the Problem Report Form and call Service.

**3-507** Is the tape indicator light ON?



After approximately 90 seconds, the indicator light should stop flashing.

**Y** ↓    **N** → Record your observation on the Problem Report Form and call Service.

**3-508** Perform the "Cleaning a cartridge tape drive" procedure as described in *Test and Diagnostic Tools* and retry the operation.

**3-509** Did the operation fail?

**Y** ↓    **N** → Troubleshooting complete.

**3-510** Perform the Running the confidence test procedure described in the Offline diagnostics - 8090 servers chapter of *Test and Diagnostic Tools*.

Did the test fail?



.The Running the confidence test procedure described in the Offline diagnostics - 8090 servers chapter of *Test and Diagnostic Tools* provides instructions for the cartridge tape drive, high capacity disk drive, and the high capacity cartridge tape drive. Use the appropriate step-by-step instructions.

**Y** ↓    **N** →    If the problem still exist, you may have a defective tape. Replace the tape and retry the operation.

If you have valuable data stored on the tape call the Systems Customer Support Center for assistance.

The has determined that you have a problem with the media or hardware. Record the message and or MP codes you received at the end of the test and follow the recommended recovery. If the message or MP codes indicates a hardware problem, call Service.



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## 4.

# Basic Communication

This chapter contains the Routine Analysis Processes (RAPs) you use to isolate and solve communication problems that may occur during the operation of the External Communication Service. The External Communication Service is responsible for basic information exchange between Xerox Network System devices and non-Xerox devices.

Do not perform any RAPs in this chapter unless you have met these prerequisites:

- You have been directed to this chapter from the Entry Level chapter of this book.
- You believe you have a problem with the External Communication Service.
- You have recorded the details of the problem on a copy of the Problem Report Form.

RAPs provide steps to isolate the problem and instructions for immediate recovery where possible. Based on your analysis, you may be directed to continue the troubleshooting process in one of the following chapters or books:

- Another chapter in this book if a problem exists with another network service or with your hardware configuration.
- *MP Codes and Messages* if the RAPs produce a problem message or maintenance panel code.
- *Test and Diagnostics* if the RAPs indicate problems that you can solve diagnostically or that require further analysis.

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## **Problems with the External Communication Service**

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If you are unable to perform a specific External Communication Service operation, locate the problem in Table 4-1. To resolve the problem, perform the steps at the line location in the section called "Resolutions."

Table 4-1. **Possible External Communication Service problems**

Problem	Location	Problem	Location
Adding a CIU	4-100	Configuring or changing an IBM 3270 SNA server port or Multiport	4-700
Adding and assigning an IBM 3270 BSC host	4-200	Configuring or changing an IBM 3270 SNA CIU port	4-800
Adding and assigning an IBM 3270 SNA host	4-300	Deleting an RS232C port or CIU configuration	4-900
Adding or changing an asynchronous server or Multiport port	4-400	Deleting an IBM 3270 host configuration	4-1000
Configuring or changing an asynchronous CIU port	4-500	Renaming the External Communication Service	4-1100
Configuring or changing an IBM 3270 BSC server port	4-600		

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## Resolutions

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This section contains the External Communication Service RAPs. Use the table in the previous section to find the problem and the line location number of the appropriate RAP. RAPs lead you through the fault isolation process. Resolutions are provided at each level of fault isolation so you can complete the attempted task.

### 4-100 Cannot add a CIU

---

**4-110** Use the **List Communication Interface Units** command to check if the CIU is registered with the Internetwork Routing Service.

Is the Communication Interface Unit registered?

**Y** ↓    **N** → Perform the “Adding a Communication Interface Unit” procedure to register the Communication Interface Unit with the Internetwork Routing Service. See the Services System Software chapter in the *Services Installation and Setup Guide*.

**4-120** Check the spelling and syntax of the CIU port name. See the External Communication Service chapter in the *Guide to System Administration Activities*.

Is the name unique?

**Y** ↓    **N** → Use the “Adding a Communication Interface Unit” procedure to reenter a unique CIU name.

**4-130** Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.

Does the verification complete successfully?

**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the External Communication Service.

**4-140** Try to change the configuration again. If you are still unable to change the Communication Interface Unit port information, fill out the Problem Report Form and call the Systems Customer Support Center.

#### **4-200** **Cannot add and assign an IBM 3270 BSC host**

---

**4-210** Use the **List Software Options** command to ensure that the IBM 3270 BSC Communication Protocol software option is enabled on the server you are trying to configure.

Is the software option enabled?

**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to set the options for communication software.

**4-220** Use the **Show RS232C Port Statistics** command to ensure that IBM 3270 emulation is stopped before you add or change port information.

Is the emulation stopped?

**Y** ↓    **N** → Use the ECS **Stop IBM 3270 Emulation** command to stop the emulation.

- 4-230** Use the **List IBM 3270 Hosts** command to check the name of the 3270 host you are adding.  
Is the name unique?
- Y** ↓    **N** → Use the “Adding and assigning an IBM 3270 BSC host” or “Changing an IBM 3270 BSC host configuration” procedures to reenter a unique host name.
- 4-240** Check your External Communication Service worksheet and with the host site to confirm these port configuration values:
- Emulated 3276 controller address
  - IBM host buffer size
  - Number of ports on the emulated 3276 controller
  - Language supported
- Are the values specified correctly?
- Y** ↓    **N** → See the “Controller address information” section in the External Communication Service chapter of the *Guide to System Administration Activities*.
- 4-250** If you are changing port information, use the **Describe RS232C Port** command to show the port configuration. If you are adding a port, refer to your External Communication Service worksheet to ensure that you are entering the correct values. Specifically, check the values for:
- RS232C port for host access
  - Access controls for each port (valid group names)
- Are the values specified correctly?

Y ↓ N → Refer to the “Planning for setup” section in the External Communication Service chapter of the *Guide to System Administration Activities* for port configuration guidelines, considerations, and limitations.

**4-260** Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.

Does the verification complete successfully?

Y ↓ N → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the the External Communication Service.

**4-270** Try to add and assign the IBM 3270 host again. If you are still unable to add and assign the host, fill out the Problem Report Form and call the Systems Customer Support Center.

#### **4-300** Cannot add or assign an IBM 3270 SNA host

**4-310** Use the **Show RS232C Port Statistics** command to ensure that IBM 3270 emulation is stopped before you add or change port information.

Is emulation stopped?

Y ↓ N → Use the ECS **Stop IBM 3270 Emulation** command to stop the emulation.

**4-320** Use the **List IBM 3270 Hosts** command to check the name of the 3270 host you are adding.

Is the name unique?

**Y ↓**    **N →**    Use the “Adding and assigning an IBM 3270 SNA host” or “Changing an IBM 3270 SNA host configuration” procedures to reenter a unique host name.

**4-330** Check your External Communication Service worksheet and with the host site to confirm these port configuration values:

- Controller XID number
- IBM host buffer size
- Number of ports on the emulated 3276 controller
- Language supported

Are the values specified correctly?

**Y ↓**    **N →**    See the “Controller address information” section in the External Communication Service chapter of the *Guide to System Administration Activities*.

**4-340** If you are changing port information, use the **Describe RS232C Port** command to show the port configuration. If you are adding a port, refer to your External Communication Service worksheet to ensure that you are entering the correct values. Specifically, check the values for:

- Port name
- Valid phone number and dialing methods
- Access controls for each port (valid group names)

Are the values specified correctly?

**Y ↓ N →** Refer to the “Planning for setup” section in the External Communication Service chapter of the *Guide to System Administration Activities* for port configuration guidelines, considerations, and limitations.

**4-350** Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.

Does the verification complete successfully?

**Y ↓ N →** Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the External Communication Service.

**4-360** Try to configure again. If you are still unable to configure the Communication Interface Unit port, fill out the Problem Report Form and call the Systems Customer Support Center.

#### **4-400 Cannot add or change an asynchronous server port or Multiport configuration**

---

**4-410** Use the **List Software Options** command to see whether the Asynchronous Communication Protocol software option is enabled on the server you are trying to configure.

Is the software option enabled?

**Y ↓ N →** Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to enable the communications options.

**4-420** Use the **List Services** command to ensure that the External Communication Service is stopped before you add or change port information.

Is the ECS stopped?

**Y** ↓    **N** →    Use the ECS **Stop** command to stop the service.

**4-430** Use the **List RS232C Ports** command to check the name of the RS232C port you are adding or changing.

Is the name you entered unique?

**Y** ↓    **N** →    Use the “Configuring the server port or a Multiport for asynchronous terminal emulation and dial-in” or “Changing an asynchronous server port or Multiport configuration” procedures to enter a unique port name.

**4-440** If you are using autodialer hardware, use the **List Circuits** command to check if it is registered with the Internetwork Routing Service. If you are not using autodialer hardware, **skip to 4-450**.

Is the autodialer registered?

**Y** ↓    **N** →    Perform the “Adding an Internetwork Routing Service circuit” procedure to register the autodialer with the Internetwork Routing Service. See the Services System Software chapter in the *Services Installation and Setup Guide*.

**4-450** If you are changing port information, use the **Describe RS232C Port** command to show the port configuration. If you are adding a port, refer to your External Communication Service worksheet to ensure that you are entering the correct values. Specifically, check the values for:

- Port number (for the Multiport Option Kit)
- Port use
- ITS connection

- Number of data and stop bits per character
- Parity of character bit pattern
- Autodialer type
- Octal values for XOn and XOff
- Equipment duplexity
- Line speed
- Port access controls (valid group names)

Are the values specified correctly?

**Y** ↓    **N** → Refer to the “Planning for setup” section in the External Communication Service chapter of the *Guide to System Administration Activities* for port configuration guidelines, considerations, and limitations.

**4-460** Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.

Does the verification complete successfully?

**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the External Communication Service.

**4-470** Try to configure again. If you are still unable to configure the server port or Multiport, fill out the Problem Report Form and call the Systems Customer Support Center.

**4-500** **Cannot configure or change a CIU port for asynchronous terminal emulation and dial-in**

- 
- 4-510** Use the **List Software Options** command to see whether the Asynchronous Communication Protocol software option is enabled on the server you are trying to configure.
- Is the software option enabled?
- Y ↓**    **N →**    Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to set the options for communication software.
- 4-520** Use the **List Services** command to ensure that the External Communication Service is stopped before you add or change port information.
- Is the ECS stopped?
- Y ↓**    **N →**    Use the ECS **Stop** command to stop the service.
- 4-530** Use the **List RS232C Ports** command to check the name of the CIU port you are adding or changing.
- Is the name you entered unique?
- Y ↓**    **N →**    Use the “Configuring a CIU port for asynchronous terminal emulation and dial-in” or “Changing an asynchronous CIU port configuration” procedures to enter a unique port name.
- 4-540** Use the **List Communication Interface Units** command to check if the CIU is registered with the Internetwork Routing Service.
- Is the Communication Interface Unit registered?

**Y ↓ N →** Perform the “Adding a Communication Interface Unit” procedure to register the Communication Interface Unit with the Internetwork Routing Service. See the Services System Software chapter in the *Services Installation and Setup Guide*.

**4-550** If you are changing port information, use the **Describe RS232C Port** command to show the port configuration. If you are adding a port, refer to your External Communication Service worksheet to ensure that you are entering the correct values. Specifically, check the values for:

- Port connection
- Local port number
- Port use
- ITS connection
- Port behavior (terminal or modem)
- Number of data and stop bits per character
- Parity of character bit pattern
- Autodialer type
- Octal values for XOn and XOff
- Equipment duplexity
- Line speed
- Port access controls (valid group names)

Are the values specified correctly?

**Y ↓ N →** Refer to the “Planning for setup” section in the External Communication Service chapter of the *Guide to System Administration Activities* for port configuration guidelines, considerations, and limitations.

**4-560** Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.

Does the verification complete successfully?

**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the External Communication Service.

**4-570** Try to configure again. If you are still unable to configure the Communication Interface Unit port, fill out the Problem Report Form and call the Systems Customer Support Center.

**4-600** **Cannot configure or change the server port for IBM 3270 BSC terminal emulation**

**4-610** Use the **List Software Options** command to ensure that the 3270 BSC Communication Protocol software option is enabled on the server you are trying to configure.

Is the software option enabled?

**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to set the options for communication software.

**4-620** Use the **List Services** command to ensure that the External Communication Service is stopped before you add or change port information.

Is the ECS stopped?

**Y** ↓    **N** → Use the ECS **Stop** command to stop the service.

**4-630** Use the **List RS232C Ports** command to check the name of the RS232C port you are adding or changing.

Is the name unique?

**Y** ↓    **N** → Use the “Configuring the server port for IBM 3270 BSC terminal emulation” or “Changing an IBM 3270 BSC server port configuration” procedures to reenter a unique name.

**4-640** If you are changing port information, use the **Describe RS232C Port** command to show the port configuration. If you are adding a port, refer to your External Communication Service worksheet to ensure that you are entering the correct values. Specifically, check the values for:

- Port use
- Equipment duplexity and line speed

Are the values specified correctly?

**Y** ↓    **N** → Refer to the “Planning for setup” section in the External Communication Service chapter of the *Guide to System Administration Activities* for port configuration guidelines, considerations, and limitations.

**4-650** If you are changing a port name, use the **List IBM 3270 Hosts** command to check if any hosts require that port. Ensure that you have changed every host entry that specifies the changed port.

Have you changed the host entries to specify the new port name?

**Y** ↓    **N** → Perform the “Changing an IBM 3270 BSC host configuration” procedure to change the host entries.

- 4-660** If you are changing port information, ensure that you have reassigned the default host.  
Is the default host reassigned?  
**Y** ↓    **N** → Perform the “Assigning a different IBM 3270 host” procedure in the External Communication Service chapter of the *Services Maintenance Guide*.
- 4-670** Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.  
Does the verification complete successfully?  
**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the the External Communication Service.
- 4-680** Try to configure again. If you are still unable to configure the server port, fill out the Problem Report Form and call the Systems Customer Support Center.
- 4-700** **Cannot configure or change the server port or a Multiport for IBM 3270 SNA terminal emulation**
- 
- 4-710** Use the **List Software Options** command to ensure that the 3270 SDLC/SNA Communication Protocol software option is enabled on the server you are trying to configure.  
Is the software option enabled?  
**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to set the options for communication software.

**4-720** Use the **List Services** command to ensure that the External Communication Service is stopped before you add or change port information.

Is the ECS stopped?

**Y** ↓    **N** → Use the ECS **Stop** command to stop the service.

**4-730** Use the **List RS232C Ports** command to check the name of the RS232C port you are adding or changing.

Is the name unique?

**Y** ↓    **N** → Use the “Configuring the server port or a Multiport for IBM 3270 SNA terminal emulation” or “Changing an IBM 3270 SNA server port or Multiport configuration” procedures to reenter a unique port name.

**4-740** If you are changing port information, use the **Describe RS232C Port** command to show the port configuration. If you are adding a port, refer to your External Communication Service worksheet to ensure that you are entering the correct values. Specifically, check the values for:

- Local port numbers (Multiport Option Kit)
- Type of data encoding (Multiport Option Kit)
- Port use
- Autodialer type
- Equipment duplexity and line speed

Are the values specified correctly?

- Y ↓**    **N →**    Refer to the “Planning for setup” section in the External Communication Service chapter of the *Guide to System Administration Activities* for port configuration guidelines, considerations, and limitations.
- 4-750**    If you are changing a port name, use the **List IBM 3270 Hosts** command to check if any hosts require that port. Ensure that you have changed every host entry that specifies the changed port.
- Have you changed the host entries to specify the new port name?
- Y ↓**    **N →**    Perform the “Changing an IBM 3270 SNA host configuration” procedure to change the host entries.
- 4-760**    If you are changing port information, ensure that you have reassigned the default host.
- Is the default host reassigned?
- Y ↓**    **N →**    Perform the “Assigning a different IBM 3270 host” procedure in the External Communication Service chapter of the *Services Maintenance Guide*.
- 4-770**    Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.
- Does the verification complete successfully?
- Y ↓**    **N →**    Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the the External Communication Service.
- 4-780**    Try to configure again. If you are still unable to configure the server port or Multiport, fill out the Problem Report Form and call the Systems Customer Support Center.

**4-800 Cannot configure or change a CIU port for IBM 3270 SNA terminal emulation**

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**4-810** Use the **List Software Options** command to ensure that the 3270 SDLC/SNA Communication Protocol software option is enabled on the server you are trying to configure.

Is the software option enabled?

**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to set the options for communication software.

**4-820** Use the **List Services** command to ensure that the External Communication Service is stopped before you add or change port information.

Is the ECS stopped?

**Y** ↓    **N** → Use the ECS **Stop** command to stop the service.

**4-830** Use the **List RS232C Ports** command to check the name of the RS232C port you are adding or changing.

Is the name unique?

**Y** ↓    **N** → Use the “Configuring a CIU port for IBM 3270 SNA terminal emulation” or “Changing an IBM 3270 SNA CIU port configuration” procedures to reenter a unique port name.

**4-840** If you are using an 873 Communication Interface Unit, use the **List Communication Interface Units** command to check if it is registered with the Internetwork Routing Service. If you are not using an 873 Communication Interface Unit, **skip to 4-740**.

Is the Communication Interface Unit registered?

**Y** ↓    **N** → Perform the “Adding a Communication Interface Unit” procedure to register the Communication Interface Unit with the Internetwork Routing Service. See the Services System Software chapter in the *Services Installation and Setup Guide*.

**4-850** If you are changing port information, use the **Describe RS232C Port** command to show the port configuration. If you are adding a port, refer to your External Communication Service worksheet to ensure that you are entering the correct values. Specifically, check the values for:

- Port connection
- Name and number of the CIU
- Port use
- Line speed

Are the values specified correctly?

**Y** ↓    **N** → Refer to the “Planning for setup” section in the External Communication Service chapter of the *Guide to System Administration Activities* for port configuration guidelines, considerations, and limitations.

**4-860** If you are changing a port name, use the **List IBM 3270 Hosts** command to check if any hosts require that port. Ensure that you have changed every host entry that specifies the changed port.

Have you changed the host entries to specify the new port name?

**Y ↓**    **N →**    Perform the “Changing an IBM 3270 SNA host configuration” procedure to change the host entries.

**4-870**    If you are changing port information, ensure that you have reassigned the default host.

Is the default host reassigned?

**Y ↓**    **N →**    Perform the “Assigning a different IBM 3270 host” procedure in the External Communication Service chapter of the *Services Maintenance Guide*.

**4-880**    Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.

Does the verification complete successfully?

**Y ↓**    **N →**    Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the External Communication Service.

**4-890**    Try to configure again. If you are still unable to configure the Communication Interface Unit port, fill out the Problem Report Form and call the Systems Customer Support Center.

#### **4-900**    Cannot delete an RS232C port or Communication Interface Unit configuration

**4-910**    Use the **List IBM 3270 Hosts** command to check whether any hosts are using the port you are deleting.

Do any hosts require the port you are trying to delete?

- Y ↓ N →** Use the **Stop IBM 3270 Emulation** command to disconnect users and stop emulation.
- 4-920** Use the **List Services** command to ensure that the External Communication Service is stopped before you delete.  
Is the ECS stopped?  
**Y ↓ N →** Use the ECS **Stop** command to stop the service.
- 4-930** Use the **List All RS232C Ports** command to locate all the RS232C ports for the Communication Interface Unit.  
Are all the ports deleted?  
**Y ↓ N →** Delete any ports that are still assigned to the CIU you are deleting.
- 4-940** Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.  
Does the verification complete successfully?  
**Y ↓ N →** Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the External Communication Service.
- 4-950** Try to delete the port again. If you are still unable to delete the port, fill out the Problem Report Form and call the Systems Customer Support Center.

**4-1000 Cannot delete an IBM 3270 host configuration**

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**4-1010** Use the **Verify Clearinghouse Entries** command to reregister External Communication Service information with the Clearinghouse Service.

Does the verification complete successfully?

**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the External Communication Service.

**4-1020** Try to delete the host again. If you are still unable to delete the host, fill out the Problem Report Form and call the Systems Customer Support Center.

**4-1100 Cannot rename the External Communication Service**

---

Use the **List External Communication Services** command to check the ECS names on the network.

Is the name unique?

**Y** ↓    **N** → Enter a use the “Renaming the External Communication Service” procedure to reenter a unique ECS name.

**4-1110** Use the **Verify Clearinghouse Entries** command to reregister the information with the Clearinghouse Service.

Does the verification complete successfully?

**Y ↓**    **N →**    Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to reinstall the External Communication Service.

**4-1120** Try the operation again. If you are still unable to rename the ECS, fill out the Problem Report Form and call the Systems Customer Support Center.



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## 5.

# Basic Service Operation

This chapter contains the Routine Analysis Processes (RAPs) you use to isolate and solve problems that occur during basic service operation.

Do not perform any RAPs in this chapter unless you have met these prerequisites:

- You have been directed to this chapter from the Entry Level chapter of this book.
- You believe you have a problem with basic service operation.
- You have recorded the details of the problem on a copy of the Problem Report Form.

RAPs provide steps to isolate the problem and instructions for immediate recovery where possible. Based on your analysis, you may be directed to continue the troubleshooting process in one of the following chapters or books:

- Another chapter in this book if a problem exists with another network service or with your hardware configuration.
- *MP Codes and Messages* if the RAPs produce a problem message or maintenance panel code.
- *Test and Diagnostics* if the RAPs indicate problems that you can solve diagnostically or that require further analysis.

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## Problems with basic service operation

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If you are unable to perform a basic service operation, locate the problem in Table 5-1. To resolve the problem, perform the steps at the line location in the section called “Resolutions.”

Table 5-1. **Possible basic service problems**

Problem	Location	Problem	Location
Activating a service	5-100	Expunging a service	5-500
Booting the server	5-200	Logging on	5-600
Changing the server profile	5-300	Installing a service on another server	5-700
Changing the volume name	5-400	Running a service	5-900

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## Resolutions

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This section contains the basic service RAPs. Use the table in the previous section to find the problem and the line location number of the appropriate RAP. RAPs lead you through the fault isolation process. Resolutions are provided at each level of fault isolation so you can complete the attempted task.

### 5-100 **Cannot activate a service**

---

**5-110** Use the **List Services** command to see which services are installed, which are active, and which are deactivated.

Is the service installed?

**Y** ↓    **N** → Use the “Installing additional services” procedure in the Services System Software chapter of the *Services Maintenance Guide* to install the service.

**5-120** Did you proceed the server from the third interrupt point and then use the **Activate Service** command?

**Y** ↓    **N** → If you allow the server to complete initialization and then use the **Activate Service** command, the service is not activated until you reboot. Reboot the server to activate the service.

**5-130** Retry the operation. If you still cannot activate the service, fill out the Problem Report Form and call the Systems Customer Support Center.

## 5-200 Cannot boot the server

---

**5-210** If you are booting from the primary drive, did you release the Alternate Boot (ALT B) button at MP code 0001?

**Y ↓ N →** Release the Alternate Boot (ALT B) button at 0001 to boot from the rigid disk drive (number 1).

Try to boot the server again. Then **skip to 5-250**.

**5-220** If you are booting from a secondary drive on a multiple-drive server, did you release the Alternate Boot (ALT B) button at the code that identifies the drive?

**Y ↓ N →** On an 8000 or an 8090 server, release the Alternate Boot (ALT B) button at 0007 for the second drive; 0008 for the third drive; and 0009 for the fourth drive. On an 8090 server, release the Alternate Boot button at 0011 for the fifth drive; 0012 for the sixth drive; and 0013 for the seventh drive.

Try to boot the server again. Then **skip to 5-250**.

**5-230** If you are booting from magnetic media, did you release the Alternate Boot (ALT B) button at 0002?

**Y ↓ N →** Retry the operation using the correct boot code.

Try to boot the server again. Then **skip to 5-270**.

**5-240** If you are booting from magnetic media, make sure you properly inserted the floppy disk or cartridge tape.

Did you correctly insert the media?

**Y** ↓    **N** → Insert the correct floppy disk or cartridge tape. See Appendix A, Hardware maintenance in the *Services Maintenance Guide* for the correct procedure.

Try to boot the server again. Then **skip to 5-270**.

**5-250** If you are booting from floppy disks or cartridge tape, make sure the read/write heads are clean.

Are the read/write heads clean?

**Y** ↓    **N** → See Appendix A, Hardware maintenance in the *Services Maintenance Guide* for the correct procedure.

Try to boot the server again. Then **skip to 5-270**.

**5-260** If you are booting from a diagnostic floppy disk or cartridge tape, did you release the Alternate Boot (ALT B) button at MP code 0005?

**Y** ↓    **N** → Release the Alternate Boot (ALT B) button at 0005 to boot from a diagnostic floppy disk or cartridge tape.

Try to boot the server again. Then **skip to 5-270**.

**5-270** Check the server maintenance panel.

Does the maintenance panel display the number 8000?

**Y** ↓    **N** → Record the MP code on the Problem Report Form. See *MP Codes and Messages* to perform the appropriate action.

**5-280** Try to boot the server again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**5-300 Cannot change the server profile**

---

**5-310** Perform the “Booting the server” procedure in the Services System Software chapter of the *Services Maintenance Guide*.

Does the server boot?

**Y** ↓    **N** → Record the MP code on the Problem Report Form. See *MP Codes and Messages* to perform the appropriate action.

**5-320** Did you perform the procedure after a non-normal startup using the second interrupt point?

**Y** ↓    **N** → If you allow the server to complete initialization and then use the **Change Profile** command, type **Proceed** for the changes to take effect.

**5-330** Did you perform the procedure after a non-normal startup using the third interrupt point?

**Y** ↓    **N** → If you allow the server to complete initialization and then use the **Change Profile** command, you must reboot the server for the changes to take effect.

**5-340** Try to change the profile again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**5-400 Cannot change the volume name**

---

**5-410** Use the **List Volumes** command to check the status of the volume.

Is the volume offline?

**Y** ↓    **N** → Use the **Offline Volume** command to take the volume offline.

**5-420** Check the spelling and syntax of the new volume name. See the “Naming conventions” section in the *Guide to System Administration Activities*.

Does the volume name conform to the Clearinghouse Service naming convention requirements?

**Y** ↓    **N** → Use the **Change Volume** command to reenter the volume name using the appropriate conventions.

**5-430** Did you properly specify the fully qualified name?

**Y** ↓    **N** → Make sure the domain and organization names exist. Then retry the operation.

**5-440** Try to change the volume name again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

## 5-500 **Cannot expunge a service**

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**5-510** Use the **List Services** command to determine if the service is installed and started.

Is the service installed?

**Y** ↓    **N** → The service you want to expunge is not installed on this server. Connect to the appropriate server and retry the operation.

Is the service stopped?

**Y** ↓    **N** → Stop all services. Reboot the server and select the third option, interrupt before running services. Logon and enable and retry the **Expunge Service** command.

**5-520** Are there any special instructions to expunge your particular service?

**Y** ↓    **N** → Retry the operation. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.



The Mail Service, External Mail Gateway, File Service, External Communication Service and the 850/860 Gateway Service have special requirements. Follow the service-specific instructions in the appropriate the *Services Maintenance Guide* to expunge your service.

**5-530** Try to expunge the service again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**5-600 Cannot log on**

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**5-610** Have the user type ? to see if the **Logon** command is available.

Is the command available?

**Y** ↓    **N** →    The user is already logged on.

**5-620** Did the user enter the correct name?

**Y** ↓    **N** →    Enter the correct user name and retry the operation.

**5-630** Did the user enter the correct password?

**Y** ↓    **N** →    Enter the correct password and retry the operation.

**5-640** Use the **List User** command to check whether the user is registered with the Clearinghouse Service.

Is the user registered in the Clearinghouse?

**Y** ↓    **N** →    Perform the "Adding Users" procedure to register the user with the Clearinghouse. See the Clearinghouse Service chapter in the *Services Maintenance Guide*.

**5-650** Try to log on again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

## 5-700 Cannot install a service on another server

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5-710 Are you trying to reinstall a service other than a Mail Service?

Y ↓    N → Perform the “Moving a Mail Service” procedure to move the service. See the Mail Service chapter in the *Services Maintenance Guide*.

5-720 Use the **List Services** command to check whether the service is installed on the server from which you are moving.

Is the service installed?

Y ↓    N → The service you want to move is not installed at this server.

5-730 At the server where you are moving the service, use the **List Software Options**.

Is the service you are moving listed as a current software option?

Y ↓    N → Call the Software Control Center to obtain passwords for the product group you are configuring. Use the **Set Software Options** command to set the software options.

5-740 Calculate the available disk storage space on the server where you want to move the service. Use the **List Services** command to check which services are installed on the server. Then, calculate how much disk storage space is already consumed. See the “Software Requirements” section in the appropriate chapters of the *Guide to System Administration Activities*. Refer to the appropriate services worksheets in the *Activities Guide*.

Is there enough disk storage space for the service you are moving?

**Y ↓**    **N →**    Delete or move information to create space on this server or select another server.

**5-750** Check the coresidency requirements and limitations of the service you are moving. See the "Dependencies and limitations" section in the appropriate chapter of the *Guide to System Administration Activities*.

Have you meet the coresidency requirements?

**Y ↓**    **N →**    You must met these requirements. If necessary, select another server location for the service you are moving.

**5-760** Try to install the service at the new server location.

Did you stop all services?

**Y ↓**    **N →**    Stop all services before you install the service.

**5-770** Did you reboot the server?

**Y ↓**    **N →**    Reboot the server, select a non-normal startup, and select the third option "Interrupt before running services."

**5-780** If you are running the Clearinghouse Service, did you proceed the server?

**Y ↓**    **N →**    Type **Proceed** to complete installation and run the service.

Retry the installation.

**5-790** If you are running the Internetwork Routing Service, did you start the circuits?

**Y ↓**    **N →**    Type **Start Circuit**. If you are using an autodialed circuit, select the correct phone number. Then log on, enable and type **Proceed** to complete installation.

**5-800**    If you are running a communication service, did you reconfigure its communication equipment?

**Y ↓**    **N →**    You must configure the equipment at the new server location just as it was at the old server. Use **List** commands to show the configuration information for the service at its old location and make a record of this information to use while installing at the new location.

**5-810**    Did you use RSA to record the communication configuration information before expunging the old service?

**Y ↓**    **N →**    Refer to the worksheets you created when you first installed the service. See your *Activities Guide*.

**5-820**    Try to move the service again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center for assistance.

**5-900**    **Cannot run a service**

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**5-910**    Use the **List Services** command to check if the service you want to run is activated.

Is the service activated?

**Y ↓**    **N →**    Perform the “Activating and deactivating services” procedure to activate the service. See the Services System Software chapter in the *Services Maintenance Guide*.

**5-920** Try to run the service again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center for assistance.

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## 6.

# Clearinghouse Service

This chapter contains the Routine Analysis Processes (RAPs) you use to isolate and solve problems that occur during the operation of the Clearinghouse Service.

Do not perform any RAPs in this chapter unless you have met these prerequisites:

- You have been directed to this chapter from the Entry Level chapter of this book.
- You believe you have a problem with the Clearinghouse Service.
- You have recorded the details of the problem on a copy of the Problem Report Form.

RAPs provide steps to isolate the problem and instructions for immediate recovery where possible. Based on your analysis, you may be directed to continue the troubleshooting process in one of the following chapters or books:

- Another chapter in this book if a problem exists with another network service or with your hardware configuration.
- *MP Codes and Messages* if the RAPs produce a problem message or maintenance panel code.
- *Test and Diagnostics* if the RAPs indicate problems that you can solve diagnostically or that require further analysis.

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## Problems with the Clearinghouse Service

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If you are unable to perform a specific Clearinghouse Service operation, locate the problem in Table 6-1. To resolve the problem, perform the steps at the line location in the section called "Resolutions."

Table 6-1. **Possible Clearinghouse Service problems**

Problem	Location	Problem	Location
Adding a member to a user group	6-100	Clearinghouse is slow	6-800
Adding or copying a domain	6-200	Comparing databases	6-900
Adding or changing user information	6-300	Creating a domain	6-1000
Backing up the database	6-400	Deleting an object	6-1100
Changing domain access	6-500	Expanding the database	6-1200
Changing group access	6-600	Inconsistent database information	6-1300
Changing organization access	6-700	Restoring databases	6-1400

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## Resolutions

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This section contains the Clearinghouse Service RAPs. Use the table in the previous section to find the problem and the line location number of the appropriate RAP. RAPs lead you through the fault isolation process. Resolutions are provided at each level of fault isolation so you can complete the attempted task.

### 6-100 **Cannot add a member to a user group**

---

**6-110** Use the **Show Group Access** command to ensure that you have administrative access to the group.



If you have self access, you can add or delete yourself. A group administrator can add or delete a group member. As an enabled System Administrator, you are automatically a group administrator until you specifically assign one. Once a group administrator is assigned, the System Administrator does not have access to the group, and must have the group administrator grant access.

Do you have administrative access rights?

**Y** ↓    **N** → Obtain administrative access to the user group. Use the “Changing group access” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-120** Use the **List Members** command to ensure that the user is not a member of the user group.

Is the user already a member of the group?

**Y** ↓    **N** →    **Continue with 6-130.**

**6-130** Check the spelling and the syntax of the user name you are adding.

Does the syntax conform to Clearinghouse Service naming convention requirements?

**Y** ↓    **N** →    See the Clearinghouse Service chapter of the *Guide to System Administration Activities* for naming conventions and requirements. Re-enter the user name correctly.

**6-140** Use the **List Users** command at the Clearinghouse Service to ensure that the user is registered in the Clearinghouse Service.

Is the user registered?

**Y** ↓    **N** →    Register the user in the Clearinghouse. Use the “Adding users” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-150** Use the **List Groups** command to ensure that the user group is registered in the Clearinghouse Service.

Is the user group registered in the Clearinghouse?

**Y** ↓    **N** →    Add the user group using the “Adding user groups and members” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*. Or re-enter the user group name correctly.

**6-160** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**6-200 Cannot add or copy a domain**

---

**6-210** Use the **Show Domain** command to ensure that you have administrative access to both the server domain and the domain you want to copy.

Do you have administrative access rights for the domains?

**Y ↓**    **N →** Obtain administrative access to the domain. Use the “Changing domain access” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-220** Check the spelling and the syntax of the domain name you are adding.

Does the syntax conform to Clearinghouse Service naming convention requirements?

**Y ↓**    **N →** See the Clearinghouse Service chapter of the *Guide to System Administration Activities* for naming conventions and requirements. Re-enter the domain name correctly.

**6-230** Check your records in the *Activities Guide* to see if the domain name you are adding has been used within the last 30 days.

Has the domain name you are adding been used within the last 30 days?

**Y ↓**    **N →** Enter a domain name that is unique and that has not been used within the last 30 days.

**6-240** Use the **List Domains** command at the Clearinghouse Service to ensure that the domain you are copying is registered in the Clearinghouse Service.

Is the domain registered?

**Y** ↓    **N** → Register the domain in the Clearinghouse. Use the “Creating domains” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-250** Use the **List Services** command to ensure that the Clearinghouse Service is stopped.

Is the Clearinghouse Service stopped?

**Y** ↓    **N** → Use the **Stop Services** command to stop the Clearinghouse Service and retry the procedure.

**6-260** If you are copying or adding a domain to a Clearinghouse on another network, use the Internetwork Routing Service **List Routes** command to check the internetwork links.

Are the internetwork links up?

**Y** ↓    **N** → See the Internetwork Routing Service chapter in the *Services Maintenance Guide* for information on internetwork connections.

**6-270** Use the **Show Status** command to check that there is enough room in the Clearinghouse database.

Is space available on the Clearinghouse database?

**Y** ↓    **N** → If the Clearinghouse database is full, perform the “Expanding the Clearinghouse database” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-280** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**6-300 Cannot add or change user information**

---

**6-310** Use the **Show Domain** command to ensure that you have administrative access to the domain.

Do you have administrative access rights?

**Y ↓ N →** Obtain administrative access to the domain. Use the “Changing domain access” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-320** Check the spelling and the syntax of the user name, alias, or password you are adding.

Does the syntax conform to Clearinghouse Service naming convention requirements?

**Y ↓ N →** See the Clearinghouse Service chapter of the *Guide to System Administration Activities* for naming conventions and requirements. Re-enter the user name correctly.

**6-330** Use the **Show User** command to check current user information in the Clearinghouse Service. If you are changing user information, is this user name or alias registered in the Clearinghouse Service?

**Y ↓ N →** Register the user in the Clearinghouse. Use the “Adding users” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

If you are adding a user, is the user name or alias unique?

**Y ↓ N →** A user with the same name is already added to the Clearinghouse. Enter a unique name.

**6-340** Use the **List Domains** and **List Organizations** commands to make sure that the domain and organization names you specified are registered in the Clearinghouse.

Are the domain and organization names registered in the Clearinghouse?

**Y** ↓    **N** →    Check the domain and organization names you are using and re-enter them.

**6-350** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

#### **6-400** Cannot back up the Clearinghouse Service

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**6-410** Use the **Show Organization** command to make sure this is the only Clearinghouse Service on the network.

Is this the only Clearinghouse Service?

**Y** ↓    **N** →    You cannot perform manual backup on a multiple-Clearinghouse network. Perform the "Correcting domain inconsistency" procedure to ensure information consistency across the network. See the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-420** Use the **List Volumes** command to ensure that the File Service volume is online.

Is the volume online?

**Y** ↓    **N** →    Use the **Online Volume** command to bring the File Service volume online.

**6-430** Use the **List File Drawers** command to ensure that you have access privileges to the File Service backup file drawer, that the drawer exists, and that it has enough free disk pages.

Do you have read, write, add, and remove access?

**Y ↓**    **N →**    Specify the correct access privileges for the file drawer. Use the “Creating public file drawers for users” procedure in the File Service chapter of the *Services Maintenance Guide*.

Does the backup file drawer exist?

**Y ↓**    **N →**    Add a file drawer for Clearinghouse Service backup information. Use the “Creating public file drawers for users” procedure in the File Service chapter of the *Services Maintenance Guide*.

Are there enough free disk pages?

**Y ↓**    **N →**    Use the “Changing file drawer information” procedure to increase the disk page allocation. See the File Service chapter in the *Services Maintenance Guide*.



The file drawer should have a page limit of 0 (unlimited).

**6-440**    Use the Clearinghouse Service **List File Services** command to ensure that the File Service you specified is registered in the Clearinghouse Service.

Is the File Service registered?

**Y ↓**    **N →**    Reboot the server containing the File Service to reregister the File Service. The Clearinghouse Service should be started when you boot the server.

**6-450**    Use the **List Services** command to ensure that the File Service is started and to check that the software versions for the Clearinghouse and File Service are compatible.

Is the File Service started?

**Y** ↓   **N** →   Use the **Start Service** command to start the File Service.

Are the software versions compatible?

**Y** ↓   **N** →   Upgrade the File Service to the same software release version as the Clearinghouse Service. See the Upgrade Instructions that came with your software.

**6-460** Use the **Show Activity** command to check the number of connections to the File Service.

Is the number of File Service connections 15 or fewer?

**Y** ↓   **N** →   Wait until there are less than 15 connections and try the backup again.

**6-470** Type **Show Backstop Log** to review system error information. Make a copy of the log. Then call the Systems Customer Support Center.

### **6-500** Cannot change domain access

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**6-510** Use the **Show Domain** command to ensure that you have administrative access to the domain.

Do you have administrative access rights?

**Y** ↓   **N** →   Obtain administrative access to the domain. Use the “Changing domain access” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-520** Check the spelling and the syntax of the domain, user, and user group names.

Does the syntax conform to Clearinghouse Service naming convention requirements?

**Y** ↓    **N** →    See the Clearinghouse Service chapter of the *Guide to System Administration Activities* for naming conventions and requirements. Re-enter the name correctly.

**6-530** If you are changing domain access privileges for a user group, use the **List Groups** command at the Clearinghouse Service serving the domain to ensure that the user group is registered in the Clearinghouse Service.

Is the group registered in the Clearinghouse?

**Y** ↓    **N** →    Register the user group in the Clearinghouse. Use the “Adding user groups and members” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-540** If you are changing domain access privileges for a user, use the **List Users** command at the Clearinghouse Service to ensure that a user is registered in the Clearinghouse Service.

Is the user registered in the Clearinghouse?

**Y** ↓    **N** →    Re-enter the user name, or add the user.

**6-550** Use the **List Domains** and **List Organizations** command to make sure that the domain and organization names you specified are registered in the Clearinghouse.

Are the domain and organization names registered in the Clearinghouse?

**Y** ↓    **N** →    Check the domain and organization names you are using and re-enter them.

**6-560** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

## 6-600 Cannot change group access

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**6-610** Use the **Show Group Access** command to ensure that you have administrative access to the group.



As System Administrator, you are automatically a group administrator until you specifically assign one. Once a group administrator is assigned, the System Administrator does not have access to the group, and must have the group administrator grant access.

Do you have administrative or group access rights?

**Y** ↓    **N** → Obtain administrative access to the group. Use the “Changing group access” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-620** Check the spelling and the syntax of the user group name.

Does the syntax conform to Clearinghouse Service naming convention requirements?

**Y** ↓    **N** → See the Clearinghouse Service chapter of the *Guide to System Administration Activities* for naming conventions and requirements. Re-enter the name correctly.

**6-630** If you are changing access privileges for a user group, use the **List Groups** command at the Clearinghouse Service to ensure that the user group is registered in the Clearinghouse Service.

Is the group registered in the Clearinghouse?

**Y ↓    N →** Register the user group in the Clearinghouse. Use the “Adding user groups and members” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-640** If you are changing access privileges for a user, use the **List Users** command at the Clearinghouse Service to ensure that the user is registered in the Clearinghouse Service.

Is the user registered in the Clearinghouse?

**Y ↓    N →** Re-enter the user name, or add the user.

**6-650** Use the **List Domains** and **List Organizations** command to make sure that the domain and organization names you specified are registered in the Clearinghouse.

Are the domain and organization names registered in the Clearinghouse?

**Y ↓    N →** Check the domain and organization names you are using and re-enter them.

**6-660** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

### **6-700    Cannot change organization access**

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**6-710** Use the **Show Organization** command to ensure that you have administrative access to the organization.

Do you have administrative access rights?

Y ↓ N → Obtain administrative access to the organization from another Organization Administrator. Use the “Changing organization access” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-720** Check the spelling and the syntax of the organization name.

Does the syntax conform to Clearinghouse Service naming convention requirements?

Y ↓ N → See the Clearinghouse Service chapter of the *Guide to System Administration Activities* for naming conventions and requirements. Re-enter the name correctly.

**6-730** If you are changing access privileges for a user group, use the **List Groups** command at the Clearinghouse Service serving the correct domain (or the domain you are working in) to ensure that the user group is registered in the Clearinghouse Service.

Is the user group registered in the Clearinghouse?

Y ↓ N → Register the user group in the Clearinghouse. Use the “Adding user groups and members” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-740** If you are changing access privileges for a user, use the **List Users** command at the Clearinghouse Service serving the correct domain (or the domain you are working in) to ensure that the user is registered in the Clearinghouse Service.

Is the user registered in the Clearinghouse?

Y ↓ N → Re-enter the user name, or add the user.

**6-750** Use the **List Domains** and **List Organizations** command to make sure that the domain and organization names you specified are registered in the Clearinghouse.

Are the domain and organization names registered in the Clearinghouse?

**Y** ↓    **N** → Check the organization name you are using and re-enter it.

**6-760** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

### **6-800** Clearinghouse is slow

---

**6-810** Use the **Show Status** command to check the size of the database.

Does the database have more than 20 percent free space left?

**Y** ↓    **N** → Enlarge the database. Use the "Expanding the Clearinghouse database" procedure in the *Services Maintenance Guide*.

Or, add another Clearinghouse Service to your network. See the Clearinghouse Service chapter in the *Services Installation and Setup Guide* for the procedures.

**6-820** Use the **List Services** command to check the coresident services.

Are the coresident services the type that would not place a heavy demand on the server?

**Y** ↓    **N** → Refer to your *Guide to System Administration Activities*. If the Clearinghouse Service is coresident with a service that places a heavy demand on the server, such as a Mail Service or a File Service, consider moving one of the services.

Also consider expanding the server memory.

- 6-830** See the Clearinghouse Service worksheets to check the group structure in the local domains.
- Is the group structure without nesting groups within groups? Is there a small number of non-local domains specified in the group names?
- Y ↓ N →** Restructure your groups to simplify them. Avoid a large number of groups nested within groups. Also avoid specifying non-local domains within nested groups. See the Clearinghouse Service chapter of the *Guide to System Administration Activities*.
- 6-840** Check the number of users per Clearinghouse Service.
- Is the number of users 125 or less?
- Y ↓ N →** Add another Clearinghouse Service to your network. See the Clearinghouse Service chapter in the *Services Installation and Setup Guide* for the procedures.
- 6-850** Use the “Showing domains” procedure to ensure that the domain is replicated in at least one other Clearinghouse.
- Is the domain replicated in one other Clearinghouse?
- Y ↓ N →** Perform the “Adding copies of domains (replicating)” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide* to replicate the domain.
- 6-860** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**6-900 Cannot compare databases**

---

**6-910** Use the **Show Domain** command to ensure that you have administrative access to the domain.

Do you have administrative access rights?

**Y** ↓    **N** → Obtain access to the domain. Use the “Changing domain access” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-920** Check the network number and the processor number to make sure you are entering them correctly.

Did you enter the correct numbers?

**Y** ↓    **N** → Re-check the numbers and re-enter them correctly.

**6-930** Check your server configuration to make sure that this is not the only Clearinghouse Service on the network.

Is there another Clearinghouse Service on the network?

**Y** ↓    **N** → You cannot compare databases on a single-Clearinghouse network.



To ensure database consistency and availability, perform the “Backing up a single Clearinghouse Service” procedure in the Clearinghouse Service chapter of the *Backup and Restore Guide*.

**6-940** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**6-1000 Cannot create a domain**

---

**6-1010** Use the **Show Domain** command to ensure that you have administrative access to the domain and organization.

Do you have administrative access rights?

**Y ↓ N →** Obtain access to the domain and organization. Use the “Changing domain access” and “Changing organization access” procedures in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-1020** Use the **Show Status** command to check that there is enough room in the Clearinghouse database.

Is there enough room in the Clearinghouse database?

**Y ↓ N →** If the Clearinghouse database is full, perform the “Expanding the Clearinghouse database” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-1030** Check the spelling and the syntax of the organization, domain, user, and user group names.

Does the syntax conform to Clearinghouse Service naming convention requirements?

**Y ↓ N →** See the Clearinghouse Service chapter of the *Guide to System Administration Activities* for naming conventions and requirements. Re-enter the name correctly.

**6-1040** Use the **List Domain** command to check if a domain with the same name already exists.

Is the name unique?

**Y** ↓    **N** →    Re-enter a unique domain name.

**6-1050** If you are creating the first domain on the network, check the organization password.

Are you entering the password correctly?

**Y** ↓    **N** →    Re-enter the password.

**6-1060** Check the domain name you are using. You cannot reuse a domain name if you deleted the domain less than 30 days ago.

Is the domain name you are using unique?

**Y** ↓    **N** →    Enter a unique domain name.

**6-1070** Use the **List Services** command to ensure that the Clearinghouse Service is stopped.

Is the Clearinghouse stopped?

**Y** ↓    **N** →    Use the **Stop Service** command to stop the Clearinghouse Service.

**6-1080** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**6-1100** **Cannot delete an object**

---

**6-1110** If you are deleting a domain, use the **Show Domain** command to ensure that you have administrative access to the domain.

If you are deleting any other object (file drawer, mailbox, etc.), use the **Show Domain** command to ensure that you have administrative access privileges.

If you are deleting a group, use the **Show Group Access** command to ensure that you have administrative access to the group.

Do you have the proper access rights?

**Y ↓**    **N →**    If you are deleting a domain, obtain domain access. If you are deleting a group or group member, obtain administrative or self access to that group. Perform the appropriate procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-1120** Check the spelling and the syntax of the object name.

Does the syntax conform to Clearinghouse Service naming convention requirements?

**Y ↓**    **N →**    See the Clearinghouse Service chapter of the *Guide to System Administration Activities* for naming conventions and requirements. Re-enter the name correctly.

**6-1130** If you are deleting a domain, use the **List Services** command to ensure that the Clearinghouse Service is stopped.



The Clearinghouse Service does not need to be stopped if you are deleting any other object type.

Is the Clearinghouse stopped?

**Y ↓**    **N →**    Use the **Stop Service** command to stop the Clearinghouse Service.

**6-1140** If you are deleting a domain, use the **Show Status** command to make sure that you are at the server which houses the domain.

Is the domain you are deleting local to the server?

**Y** ↓    **N** → Go to the server that has the original copy of the domain and try the operation again.

**6-1150** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

### **6-1200 Cannot expand the Clearinghouse database**

---

**6-1210** Use the **Show Domain** command to ensure that you have administrative access to the domain.

Do you have administrative rights?

**Y** ↓    **N** → Obtain domain access. Perform the “Changing domain access” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-1220** Use the **Show Status** command to check that there is enough room in the Clearinghouse database for expansion.

Is there enough room in the database?

**Y** ↓    **N** → If the Clearinghouse database is full, add a new Clearinghouse Service on a different server. See the Clearinghouse Service chapter in the *Services Installation and Setup Guide*.

**6-1230** Use the **List Services** command to ensure that the Clearinghouse Service is stopped.

Is the Clearinghouse Service stopped?

**Y** ↓    **N** → Use the **Stop Service** command to stop the Clearinghouse Service.

**6-1240** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**6-1300 Database information is inconsistent**

---

**6-1310** Use the **Show Status** command to check that there is enough room in the Clearinghouse database.

Is there enough room in the database?

**Y** ↓    **N** → Expand the database, or add a new Clearinghouse Service on a different server. See the Clearinghouse Service chapter in the *Services Installation and Setup Guide*.

**6-1320** Use the **List Services** command to ensure that a Clearinghouse Service is started.

Is the Clearinghouse Service started?

**Y** ↓    **N** → Use the **Start Service** command to start the Clearinghouse Service.

**6-1330** If the database is inconsistent across an internetwork, use the Internetwork Routing Service **List Routes** command to check the Internetwork Routing Service links.

Are the links up?

**Y ↓ N →** Perform the “Starting and stopping circuits” procedure in the Internetwork Routing Service chapter of the *Services Maintenance Guide* to start any links. Perform the “Correcting domain inconsistency” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide* immediately afterwards.

**6-1340** Use the **Show Time** command to check the times at all servers.

Is the time difference among servers less than 10 minutes?



If the server is local, a time difference of seconds can effectively block communication and produce inconsistencies.

**Y ↓ N →** Power down the server that shows a time difference; then power it up again.

**6-1350** Use the **List Services** command to ensure that the Mail Service is started.

Is the Mail Service started?

**Y ↓ N →** Use the **Start Service** command to start the Mail Service.

**6-1360** Check the distribution of your services on your servers.

Is the Mail Service installed on a different server?

**Y ↓ N →** Move the Mail Service to a different server. See the “Moving a service to another server” procedure in the Services System Software chapter of the *Services Maintenance Guide*.

**6-1370** Use the “Showing domains” procedure to ensure that the domain is replicated on at least one other Clearinghouse Services.

Is the domain replicated in least one Clearinghouse?

**Y** ↓    **N** → Perform the “Adding copies of domains (replicating)” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-1380** Check to ensure that the domain was replicated immediately after you installed a second Clearinghouse Service on your network.

Was the domain replicated?

**Y** ↓    **N** → Perform the “Adding copies of domains (replicating)” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**6-1390** Try the operation again. If it fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**6-1400** **Cannot restore the Clearinghouse Service database**

---

**6-1410** Check your server configuration to make sure that this is the only Clearinghouse Service on the network.

Is this the only Clearinghouse Service?

**Y** ↓    **N** → You cannot restore on a multiple-Clearinghouse network.

**6-1420** Use the **List File Drawers** command to ensure that you have read, write, add, and remove access to the File Service backup file drawer.

Do you have read, write, add, and remove access?

**Y ↓ N →** Use the “Creating public file drawers for users” procedure in the File Service chapter of the *Services Maintenance Guide* to change file drawer access.

**6-1430** Use the Clearinghouse Service **List File Services** command to ensure that the File Service you specified is registered in the Clearinghouse Service.

Is the File Service registered?

**Y ↓ N →** Reboot the server, stop the Clearinghouse Service, and reregister the File Service.

**6-1440** Use the **List Volumes** command to ensure that the File Service volume is online.

Is the volume online?

**Y ↓ N →** Use the **Online Volume** command to bring the File Service volume online.

**6-1450** Use the **List Services** command to ensure that the File Service is started and to check the software version for the Clearinghouse and File Service.

Is the File Service started?

**Y ↓ N →** Use the **Start Service** command to start the File Service.

Are the software versions compatible?

**Y ↓ N →** Update the software so that the same versions are running on both servers.

**6-1460** Use the **Show Activity** command to check the number of connections to the File Service.

Are the number of File Service connections 15 or less?

**Y ↓ N →** Wait until there are less than 15 connections and try the backup again.

- 6-1470** Use the **List File Drawers** command to ensure that the backup file drawer exists.  
Does the file drawer exist?  
**Y** ↓    **N** → Add a file drawer for Clearinghouse Service backup information. Use the "Creating public file drawers for users" procedure in the File Service chapter of the *Services Maintenance Guide*.
- 6-1480** Use the **List Files** command at the Clearinghouse Service file drawer to ensure that the backed up domain exists.  
Does the backed up domain exist?  
**Y** ↓    **N** → Use an older backup version, or re-enter the lost information manually.
- 6-1490** Type **Show Backstop Log** to review system error information. Make a copy of the log. Then call the System Customer Support Center.



This chapter contains the Routine Analysis Processes (RAPs) you use to isolate and solve problems that occur during the operation of the File Service.

Do not perform any RAPs in this chapter unless you have met these prerequisites:

- You have been directed to this chapter from the Entry Level chapter of this book.
- You believe you have a problem with the File Service.
- You have recorded the details of the problem on a copy of the Problem Report Form.

RAPs provide steps to isolate the problem and instructions for immediate recovery where possible. Based on your analysis, you may be directed to continue the troubleshooting process in one of the following chapters or books:

- Another chapter in this book if a problem exists with another network service or with your hardware configuration.
- *MP Codes and Messages* if the RAPs produce a problem message or maintenance panel code.
- *Test and Diagnostics* if the RAPs indicate problems that you can solve diagnostically or that require further analysis.

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## Problems with the File Service

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If you are unable to perform a specific File Service operation, locate the problem in Table 7-1. To resolve the problem, perform the steps at the line location in the section called "Resolutions."

Table 7-1. **Possible File Service problems**

Problem	Location	Problem	Location
Adding a document to a file drawer at a workstation	7-100	Deleting a desktop	7-900
Adding a file drawer	7-200	Deleting a file drawer	7-1000
Bringing a volume online	7-300	Deleting old file versions	7-1100
Changing the file drawer access list	7-400	Deleting or moving a file drawer document at a workstation	7-1200
Changing the file drawer name	7-500	Moving a file drawer from one File Service to another File Service	7-1300
Changing the file drawer owner	7-600	Opening a file drawer or copying a file drawer document at a workstation	7-1400
Changing the file drawer page limit	7-700	Reporting disk usage	7-1500
Changing the name of a file drawer document at a workstation	7-800	Storing a desktop to a File Service	7-1600

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## Resolutions

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This section contains the File Service RAPs. Use the table in the previous section to find the problem and the line location number of the appropriate RAP. RAPs lead you through the fault isolation process. Resolutions are provided at each level of fault isolation so you can complete the attempted task. These RAPs identify problems you may have during routine System Administration operations, as well as those encountered by a workstation user.

### 7-100 **Cannot add a document to a file drawer at a workstation**

---

7-110 Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y** ↓    **N** → Use the **Open Volume** command to open the volume.

Is the volume online?

**Y** ↓    **N** → Use the **Online Volume** command to bring the volume online.

7-120 Use the **List File Drawers** command to ensure that the user has add access rights, and that there is enough space in the file drawer.

Does the user have add access rights to the file drawer?

**Y** ↓    **N** → Have the owner of the file drawer assign add access rights. Or, with the owner's permission, assign add access rights to the user. See the "Changing

file drawer information” procedure in the File Service chapter of the *Services Maintenance Guide*.

Is space available in the file drawer?



If the file drawer has a page limit, it is displayed along with the available disk pages.

**Y ↓ N →** Inform the file drawer owner of this problem. If it is a public file drawer, have the owner inform all users to delete unwanted files or to archive files, if appropriate, so more space will be available. Or, you may increase the size of the file drawer using the “Changing file drawer information” procedure in the File Service chapter of the *Services Maintenance Guide*.

**7-130** Use the **List Services** command to ensure that the File Service is started.

Is the File Service started?

**Y ↓ N →** Use the **Start Service** command to start the File Service.

**7-140** Have the user try the operation again. If the user is still unable to add a document to the file drawer, see the workstation documentation for more information. If you cannot resolve the problem, fill out the Problem Report Form and call the Systems Customer Support Center.

### **7-200 Cannot add a file drawer**

---

**7-210** Use the **List Volumes** command to ensure the volume is open and to check the space on the File Service volume.

Is the volume open?

Y ↓ N → Use the **Open Volume** command to open the volume.

Is there enough space on the File Service volume?

Y ↓ N → Add the file drawer on a different File Service. Or, recover disk space using one or more of these procedures in the *Services Maintenance Guide*: Recovering file drawer space by deleting old file versions, Deleting file drawers, or Recovering File Service disk space by deleting obsolete desktops.

**7-220** Use the **List File Drawers** command to ensure that the file drawer name is unique.

Is the file drawer name unique?

Y ↓ N → Pick a unique name and use the appropriate procedure to create a file drawer. See the File Service chapter of the *Services Maintenance Guide*.

**7-230** Use the **List Users** command at the Clearinghouse Service to ensure the owner is registered in the Clearinghouse.

Is the owner registered in the Clearinghouse?

Y ↓ N → Register the owner in the Clearinghouse. Use the “Adding users” procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**7-240** Try to add the file drawer again. See the appropriate procedure in the File Service chapter of the *Services Maintenance Guide*. If you are still unable to add the file drawer, fill out the Problem Report Form and call the Systems Customer Support Center.

**7-300 Cannot bring a volume online**

---

**7-310** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y** ↓    **N** →    Use the **Open Volume** command to open the volume.

**7-320** If you are still unable to bring the volume online, fill out the Problem Report Form and call the Systems Customer Support Center.

**7-400 Cannot change the file drawer access list**

---

**7-410** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y** ↓    **N** →    Use the **Open Volume** command to open the volume.

**7-420** Use the **List File Drawers** command to ensure that you specified the correct file drawer.

Did you specify the correct file drawer name?

**Y** ↓    **N** →    Try the operation again specifying the correct file drawer.

**7-430** If a user cannot change the access list, use the **List File Drawers** command. Ensure that the user has change access list rights to the file drawer.

Does the user have change access list rights?

**Y ↓**    **N →**    Let the owner of the file drawer decide whether or not to assign change access list rights. Or, with the owner's permission, assign change access list rights to the user(s). See the "Changing file drawer information" procedure in the File Service chapter of the *Services Maintenance Guide*.

**7-440** If you are trying to add new users to the access list, use the **List Users** command at the Clearinghouse Service to ensure that those users are registered in the Clearinghouse.

Are the new users registered in the Clearinghouse?

**Y ↓**    **N →**    Register the users in the Clearinghouse. Use the "Adding users" procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.

**7-450** Try to change the access list again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**7-500**    **Cannot change the file drawer name**

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**7-510** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y ↓**    **N →**    Use the **Open Volume** command to open the volume.

**7-520** Use the **List File Drawers** command to ensure that you specified the correct file drawer.

Did you specify the correct file drawer name?

**Y ↓**    **N →**    Try the operation again specifying the correct file drawer.

- 7-530** Try to change the name again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.
- 7-600** **Cannot change the file drawer owner**
- 
- 7-610** Use the **List Volumes** command to check the status of the volume.  
Is the volume open?  
**Y** ↓    **N** → Use the **Open Volume** command to open the volume.
- 7-620** Use the **List File Drawers** command to ensure that you specified the correct file drawer.  
Did you specify the correct file drawer name?  
**Y** ↓    **N** → Try the operation again specifying the correct file drawer.
- 7-630** Use the **List Users** command at the Clearinghouse Service. Ensure that the new owner's name is registered in the Clearinghouse.  
Is the name registered in the Clearinghouse?  
**Y** ↓    **N** → Register the owner in the Clearinghouse. Use the "Adding users" procedure in the Clearinghouse Service chapter of the *Services Maintenance Guide*.
- 7-640** Try to change the owner again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

### **7-700 Cannot change the file drawer page limit**

---

**7-710** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y** ↓    **N** →    Use the **Open Volume** command and open the volume.

**7-720** Use the **List File Drawers** command to ensure that you specified the correct file drawer.

Did you specify the correct file drawer name?

**Y** ↓    **N** →    Try the operation again specifying the correct file drawer.

**7-730** Try to change the file drawer page limit again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

### **7-800 Cannot change the name of a file drawer document at a workstation**

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**7-810** Use the **List Volumes** command to check the status of the volume. If the volume is closed or offline, the file drawer cannot be opened.

Is the volume open?

**Y** ↓    **N** →    Use the **Open Volume** command to open the volume.

Is the volume online?

**Y** ↓    **N** →    Use the **Online Volume** command to bring the volume online.

**7-820** Use the **List File Drawers** command to ensure that the user has read and write access rights to the file drawer.

**Y ↓ N →** Have the owner of the file drawer assign read and write access rights. Or, with the owner's permission, assign the access rights to the user. See the "Changing file drawer information" procedure in the File Service chapter of the *Services Maintenance Guide*.

**7-830** Use the **List Services** command to ensure that the File Service is started.

Is the File Service started?

**Y ↓ N →** Use the **Start Service** command to start the File Service.

**7-840** Have the user try the operation again. If the user is still unable to change the name of the document, see the workstation documentation for more information. If you cannot resolve the problem, fill out the Problem Report Form and call the Systems Customer Support Center.

### **7-900 Cannot delete a desktop**

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You may delete the desktop of any user. A user may delete his or her own desktop.

**7-910** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y ↓ N →** Use the **Open Volume** command to open the volume.

**7-920** Use the **List Desktops** command to ensure that the desktop exists at the File Service.

Does the desktop exist?

**Y** ↓    **N** →    Use the correct desktop name and try the operation again.

**7-930** Try to delete the desktop again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**7-1000** **Cannot delete a file drawer**

---

**7-1010** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y** ↓    **N** →    Use the **Open Volume** command to open the volume.

**7-1020** Use the **List File Drawers** command to ensure that you specified the correct file drawer name.

Did you specify the correct file drawer?

**Y** ↓    **N** →    Use the “Deleting a file drawer” procedure and specify the correct file drawer name. See the File Service chapter in the *Services Maintenance Guide*.

**7-1030** Is the file drawer available?

**Y** ↓    **N** →    If the file drawer is in use, you cannot delete it. Try the operation again later.

**7-1040** Try to delete the file drawer again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**7-1100 Cannot delete old file versions**

---

**7-1110** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y** ↓    **N** → Use the **Open Volume** command to open the volume.

**7-1120** If a user cannot delete old file versions, use the **List File Drawers** command. Ensure that the user has write and remove access to the file drawer. A 6085 or 8010 user must also have read access to list the files.

Does the user have the proper access rights to the file drawer?

**Y** ↓    **N** → Let the owner of the file drawer decide whether to assign access rights to the user. Or, with the owner's permission, give the user the required access so he can perform the operation. See the "Changing file drawer information" procedure in the File Service chapter of the *Services Maintenance Guide*.

**7-1130** Ensure that you specified the correct directory path (file drawer/folder).

Did you specify the correct directory path?

**Y** ↓    **N** → Try the operation again using the correct information.

**7-1140** Perform the "Monitoring file drawer disk usage" procedure to ensure that old file versions exist. See the File Service chapter of the *Services Maintenance Guide*.

Do old file versions exist?

**Y** ↓    **N** → There are no versions to delete; no further action is required.

**7-1050** Try to delete old file versions again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

**7-1200 Cannot delete or move a file drawer document at a workstation**

---

**7-1210** Use the **List Services** command to ensure that the File Service is started.

Is the File Service started?

**Y** ↓    **N** → Use the **Start Service** command and start the File Service.

**7-1220** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y** ↓    **N** → Use the **Open Volume** command to open the volume.

Is the volume online?

**Y** ↓    **N** → Use the **Online Volume** command to bring the volume online.

**7-1230** Use the **List File Drawers** command to ensure that the user has write and remove access rights to the file drawer. A 6085 or 8010 user must also have read access to list the files.

Does the user have proper access rights?

**Y** ↓    **N** → Have the owner of the file drawer assign the appropriate access rights. Or, with the owner's permission, assign access rights to the user. See the "Changing file drawer information" procedure in the File Service chapter of the *Services Maintenance Guide*.

**7-1240** Have the user try the operation again. If the user is still unable to delete or move a document from the file drawer, see the workstation documentation for more information. If you cannot resolve the problem, fill out the Problem Report Form and call the Systems Customer Support Center.

**7-1300 Cannot move a file drawer from one File Service to another File Service**

---

**7-1310** Use the **List Volumes** command at the File Service from which you are moving the file drawer. Ensure that the volume is online.

Is the volume online?

**Y** ↓    **N** →    Use the **Online Volume** command to bring the volume online.

**7-1320** Use the **List File Drawers** command at the File Service from which you are moving the file drawer. Ensure that you specified the correct file drawer name.

Did you specify the correct file drawer?

**Y** ↓    **N** →    Try the procedure again using the correct file drawer.

**7-1330** Use the **List Volumes** command at the File Service where you plan to move the file drawer. Check the status of the File Service volume.

Is the volume online?

**Y** ↓    **N** →    Use the **Online Volume** command to bring the volume online.

Is there enough space on the File Service volume where you plan to move the file drawer?

**Y ↓ N →** Move the file drawer to a different File Service. Or, recover disk space using one or more of these procedures in the File Service chapter of the *Services Maintenance Guide*: Recovering file drawer space by deleting old file versions, Deleting file drawers, or Recovering File Service disk space by deleting obsolete desktops.

**7-1340** Use the **List File Drawers** command at the File Service where you are moving the file drawer. Ensure that the file drawer name is unique on that volume.

Is the file drawer name unique?

**Y ↓ N →** Change the file drawer name. See the “Changing file drawer information” procedure in the File Service chapter of the *Services Maintenance Guide*.

**7-1350** Try the operation again. If you are still unable to move a file drawer, fill out the Problem Report Form and call the Systems Customer Support Center.

#### **7-1400 Cannot open a file drawer or copy a document from a file drawer at a workstation**

**7-1410** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y ↓ N →** Use the **Open Volume** command to open the volume.

Is the volume online?

**Y ↓ N →** Use the **Online Volume** command to bring the volume online.

- 7-1420** Use the **List File Drawers** command to ensure that the user has read access rights to the file drawer.
- Does the user have proper access?
- Y** ↓    **N** → Have the owner of the file drawer assign read access rights. Or, with the owner's permission, assign read access rights to the user. See the "Changing file drawer information" procedure in the File Service chapter of the *Services Maintenance Guide*.
- 7-1430** Use the **List Services** command to ensure that the File Service is started.
- Is the File Service started?
- Y** ↓    **N** → Use the **Start Service** command to start the File Service.
- 7-1440** Have the user try the operation again. If the user is still unable to open a file drawer or copy a document from the file drawer, see the workstation documentation for more information. If you cannot resolve the problem, fill out the Problem Report Form and call the Systems Customer Support Center.

**7-1500 Cannot report disk usage**

---

**7-1510** Use the **List Volumes** command to check the status of the volume.

Is the volume open?

**Y ↓ N →** Use the **Open Volume** command to open the volume.

Is there enough space on the File Service volume?

**Y ↓ N →** Recover disk space using one or more of these procedures in the *Services Maintenance Guide*: Recovering file drawer space by deleting old file versions, Deleting file drawers, or Recovering File Service disk space by deleting obsolete desktops.

**7-1520** Use the **List File Drawers** command. Ensure that you specified the correct file drawer from which to create the report.

Did you specify the correct file drawer name?

**Y ↓ N →** Try the operation again using the correct file drawer name. See the “Monitoring file drawer disk usage” procedure in the File Service chapter of the *Services Maintenance Guide*.

**7-1530** Use the **List File Drawers** command at the File Service where you are storing the report. Ensure that you specified the correct file drawer name, that you have read and add access to the file drawer, and that there is enough space in the file drawer.

Did you specify the correct file drawer name?

**Y ↓ N →** Try the operation again using the correct file drawer name. See the “Monitoring file drawer disk usage” procedure in the File Service chapter of the *Services Maintenance Guide*.

Do you have read and add access rights to the file drawer?



If you plan to delete or move the report from the file drawer, you must also have write and remove access.

**Y ↓ N →** Give yourself access rights. See the “Changing file drawer information” procedure in the File Service chapter of the *Services Maintenance Guide*.

Is space available in the file drawer?



If the file drawer has a page limit, it is displayed along with the available disk pages.

**Y ↓ N →** Inform the file drawer owner of this problem. If it is a public file drawer, have the owner inform all users to delete unwanted files or to archive files, if appropriate, so more space will be available. You may also select a file drawer that has sufficient space for the report. **Note:** If you select a different file drawer, be sure you have sufficient access rights to that file drawer.

**7-1540** Try to report disk usage again. If the operation fails, fill out the Problem Report Form and call the Systems Customer Support Center.

### **7-1600** Cannot store a desktop to the File Service

---

**7-1610** Check the file server maintenance panel display.

Does the panel display 8000?

**Y** ↓    **N** →    Reboot the server and try the operation again.

**7-1620** Use the **List Volumes** command to check the status of the volume.

Is the volume online?

**Y** ↓    **N** →    Use the **Online Volume** command to bring the volume online.

**7-1630** Check the user's home File Service entry in the Clearinghouse Service.

Does it the home File Service entry match a File Service on the network?

**Y** ↓    **N** →    Use the **Change User** command to change the home File Service entry.

**7-1640** Use the **List Desktops** command to check the disk pages consumed by the desktop you plan to store. Use the **List Volumes** command to check the available disk pages on the File Service volume.

Is space available on the File Service to store the desktop?

**Y** ↓    **N** →    Recover disk space using one or more of these procedures in the File Service chapter of the *Services Maintenance Guide*: Recovering file drawer space by deleting old file versions, Deleting file drawers, or Recovering File Service disk space by deleting obsolete desktops. Or, ask file drawer owners to clean out their file drawers and archive files, if appropriate.

**7-1650** Reboot the workstation and try the operation again. If you are still unable to store a desktop to the File Service, see the workstation documentation for more information. If you cannot resolve the problem, fill out the Problem Report Form and call the Systems Customer Support Center.

