

Generating,
Running, and
Using DG/XAP™



GENERATING, RUNNING, AND USING DG/XAP™

Data General's File Transfer Utility

093-000352-00

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+-----+  
| For the latest enhancements, cautions, documentation changes, |  
| and other information on this product, please see the         |  
| Release Notice (085 series) supplied with the software.     |  
+-----+
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Generating, Running and Using DG/GATE

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PREFACE

This manual shows how to load, generate, and operate DG/XAP (Xfer Application Program). This Data General Corporation (DGC) software program supports the transfer of files between DGC computers that are linked by asynchronous communications lines.

Terminal operators who will use DG/XAP to transfer files, should read Chapters 4 through 6. System managers who will be responsible for loading and generating DG/XAP, should read Chapters 2 and 3.

MANUAL ORGANIZATION

Chapter 1

Concepts and Overview

This chapter provides an overview of DG/XAP operation. After reading it, you should know what DG/XAP does and understand the types of communications links DG/XAP will support.

Chapter 2

How to Load DG/XAP

This chapter explains how to load DG/XAP on your DGC computer.

Chapter 3

How to Generate DG/XAP

This chapter explains how to generate a version of DG/XAP tailored to your DGC system.

Chapter 4

DG/XAP Commands

This chapter describes the commands supported by DG/XAP. It describes the commands used to control and monitor program execution, to send and receive files, and to run the program without operator intervention.

Chapter 5

How to Operate DG/XAP

This chapter explains how to execute DG/XAP, how to transfer files, and how to terminate DG/XAP.

Chapter 6

Dictionary of Commands

This chapter provides a detailed description of all DG/XAP commands.

Appendix A

Status and Error Messages

Appendix A describes the DG/XAP status messages. It also describes error messages, explaining how the error occurred and how to correct the error.

Appendix B

Glossary

Appendix B defines the terms and concepts in the manual.

Format Description

COMMAND

Uppercase type is used to indicate mnemonics for commands, for example, MOVE.

argument

Lowercase type is used to represent the argument used with a command. In the command, you must replace this symbol with the exact code for the argument you need, for example, FILE1.

[optional]

Brackets denote an optional argument or switch. If you use the argument or switch, do not enter the brackets in your command line.

arg1/arg2

Lowercase type separated by a slash (/) denotes that you may choose between argument 1 and argument 2, for example, you may enter either a pathname or a special template.

DG/XAP Terms

For a description of the terms used in this manual, refer to the glossary.

TABLE OF CONTENTS

| | Page |
|---|------|
| PREFACE..... | i |
| | |
| CHAPTER 1 - CONCEPTS AND OVERVIEW..... | 1.1 |
| Features..... | 1.2 |
| Hardware and Software Environment..... | 1.3 |
| Hardware..... | 1.3 |
| Software..... | 1.3 |
| DG/XAP Configurations..... | 1.4 |
| Communications Links..... | 1.7 |
| Switched Lines..... | 1.7 |
| Dedicated Lines..... | 1.8 |
| | |
| CHAPTER 2 - HOW TO LOAD DG/XP..... | 2.1 |
| | |
| CHAPTER 3 - HOW TO GENERATE DG/XAP..... | 3.1 |
| Preparing for Generation..... | 3.2 |
| Generation Dialogue..... | 3.2 |
| Creating the Program Generation File..... | 3.3 |
| Editing the Program Generation File..... | 3.6 |

| | |
|---|---------|
| CHAPTER 4 - DG/XAP COMMANDS..... | 4.1 |
| Interactive Commands..... | 4.2 |
| Queued Commands..... | 4.2 |
| Using Interactive and Queued Commands..... | 4.4 |
| Command Files..... | 4.6 |
| Entering Commands in IPC Mode..... | 4.7 |
| Summary of DG/XAP Commands..... | 4.7 |
| CHAPTER 5 - HOW TO OPERATE DG/XAP..... | 5.1 |
| Executing DG/XAP..... | 5.2 |
| Remote System..... | 5.2 |
| Local System..... | 5.2 |
| Tracking System Operation..... | 5.2 |
| Transferring Files..... | 5.3 |
| Transferring Files Over a Dedicated Line..... | 5.3 |
| Transferring Files Over a Switched Line..... | 5.3 |
| Confirmation of File Transfer..... | 5.4 |
| Terminating DG/XAP..... | 5.4 |
| CHAPTER 6 - DICTIONARY OF COMMANDS..... | 6.1 |
| APPENDIX A - STATUS AND ERROR MESSAGES..... | A.1 |
| APPENDIX B - GLOSSARY..... | B.1 |

FIGURES

| | |
|---|------|
| 1-1. File Transfer Using DG/XAP..... | 1.4 |
| 1-2. File Transfer Without Operator Intervention..... | 1.5 |
| 1-3. Multiple File Transfer Using DG/XAP..... | 1.6 |
| 1-4. Switched Communications Lines..... | 1.7 |
| 1-5. Dedicated Communications Lines..... | 1.8 |
| 3-1. Sample XAPGEN LIST Display..... | 3.8 |
| 4-1. Control Unit Execution..... | 4.3 |
| 4-2. Sample Control Unit..... | 4.4 |
| 4-3. Sample Command File..... | 4.6 |
| 5-1. File Transfer Over a Dedicated Line..... | 5.3 |
| 5-2. File Transfer Over a Switched Line..... | 5.4 |
| 6-1. Sample Queue Display..... | 6.34 |
| 6-2. Sample Status Display..... | 6.41 |

TABLES

| | |
|---|-----|
| 3-1. Commands Used to Edit the XAP.GN File..... | 3.6 |
| 4-1. Interactive and Queued Commands..... | 4.5 |
| 4-2. Summary of DG/XAP Commands..... | 4.8 |
| 6-1. Template Characters..... | 6.3 |
| A-1. Correcting Keyboard Errors..... | A.1 |

CHAPTER 1

CONCEPTS AND OVERVIEW

The DG/XAP file transfer utility permits the transfer of files from one DGC computer to another DGC computer over an asynchronous communications line.

Using DG/XAP commands, you can establish connection with a remote site, send and receive data, monitor the transmission, and close the connection.

DG/XAP is ideally suited to the needs of a company using a distributed processing environment. Using DG/XAP, the central location can automatically dial up remote stores or branch offices each night and retrieve daily transactions and transmit daily reports.

DG/XAP runs under the AOS, AOS/VS, or ECLIPSE RDOS operating systems.

FEATURES

The features supported by DG/XAP include the following:

- . Transfer of data over asynchronous lines
- . Block checking with error recovery, data compression, and CRC-16 checksum
- . Unattended operation using previously defined command files
- . Automatic dialing of remote system
- . Automatic restart of file transfer if the communications line disconnects
- . Communications and activity logging
- . Confirmation of command execution

HARDWARE AND SOFTWARE ENVIRONMENT

This section presents an overview of typical DG/XAP hardware and software configurations.

Hardware

A generalized listing of the hardware required to run DG/XAP follows.

- . Data General Eclipse computers licensed to run under AOS, AOS/VS, or ECLIPSE RDOS operating systems
- . An asynchronous multiplexor board, one of the operating system supported devices for connecting communications lines to your computer (ALM, ULM, IAC, etc.)
- . A data set (modem) which permits transmission of data over a telecommunications line and establishes a switched-line connection
or
A modem eliminator that allows you to directly connect an asynchronous line between two computers
- . A communications link, which may be either a physical cable or telecommunications network system

Software

For one DGC computer to communicate with another DGC computer, each DGC site must be running the following software:

- | |
|--|
| <ul style="list-style-type: none">. AOS, Data General's Advanced Operating System or. AOS/VS, Data General's Advanced Operating System with Virtual Storage or. RDOS, Data General's Real-Time Disc Operating System |
| and |
| <ul style="list-style-type: none">. DG/XAP |

DG/XAP Configurations

The following are some examples of typical DG/XAP configurations.

The first example shows a basic file transfer, the second example shows an unattended file transfer, and the third example shows a multiple file transfer using DG/XAP command files.

Basic File Transfer

Figure 1-1 shows a DG/XAP configuration composed of two DGC systems, each executing DG/XAP. The computer on one end of the line is executing DG/XAP in **CONTROL MODE** while the computer on the other end of the line is executing DG/XAP in **SLAVE MODE**. You enter commands from the computer executing DG/XAP in **CONTROL MODE** to initiate the transfer of files between the systems. All commands that control activity between the two systems must be entered from the system running in **CONTROL MODE**.

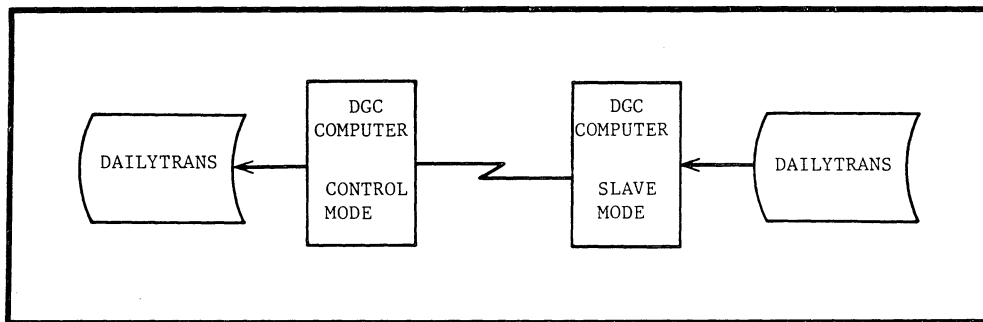


Figure 1-1. File Transfer Using DG/XAP

Figure 1-1 shows the transfer of the file DAILYTRANS from the remote system (running in SLAVE MODE) to the local system (running in CONTROL MODE).

Unattended File Transfer

In this example, a company, based in New York needs to transfer files to and from its branch offices.

In Figure 1-2, a DGC system in the New York location is executing DG/XAP in CONTROL MODE. The DGC systems in each branch are executing DG/XAP in SLAVE MODE. The user in New York may direct DG/XAP to use asynchronous communications lines to transfer files from their Atlanta branch and Chicago branch to New York simultaneously. After DG/XAP completes the file transfer, the user in New York may then direct DG/XAP to transfer files from their Boston branch and Miami branch to New York.

By using the DG/XAP auto dialing capability and using previously defined DG/XAP command files (command files are described in Chapter 4), you can transfer files from the remote sites to the central site in New York overnight without operator intervention.

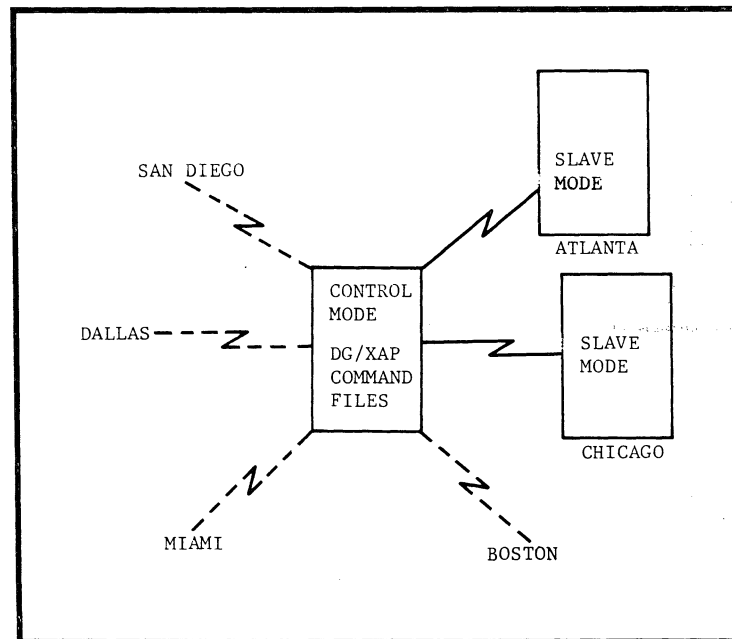


Figure 1-2. File Transfer Without Operator Intervention

Multiple File Transfers

In this example, the regional office of a company needs to transfer files from its branch offices then consolidate those files and transfer the consolidated files to the central office. Figure 1-3 shows a DG/XAP configuration that meets this company's needs.

The DGC computer at the Central Office is running in CONTROL MODE. The DGC computer at the Regional Office is transmitting over one asynchronous line in SLAVE MODE and two asynchronous lines in CONTROL MODE. This configuration allows the Regional Office to gather data from the branch offices, consolidate the data, and transmit the consolidated data to the Central Office.

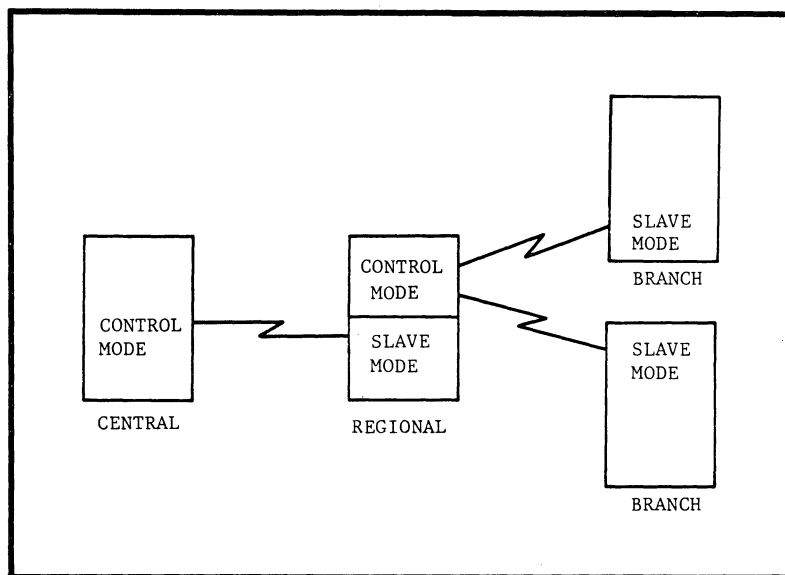


Figure 1-3. Multiple File Transfer Using DG/XAP

COMMUNICATION LINKS

Telephone and other types of communications lines cannot accept the electronic signal that computers use to encode data. Communications stations must use a data set (modem) to convert data to line-acceptable form before sending it. The receiving station uses another modem to convert the signal back into a form the computer accepts.

Switched Lines

Telecommunications companies offer switched networks to handle calls on demand. Using a switched network, you "dial up" the remote site data set in the same way you make a telephone call and maintain the connection only while transmitting data.

Using the DG/XAP DIAL feature you can automatically dial the remote site if the data set at the local site has auto-dial capabilities.

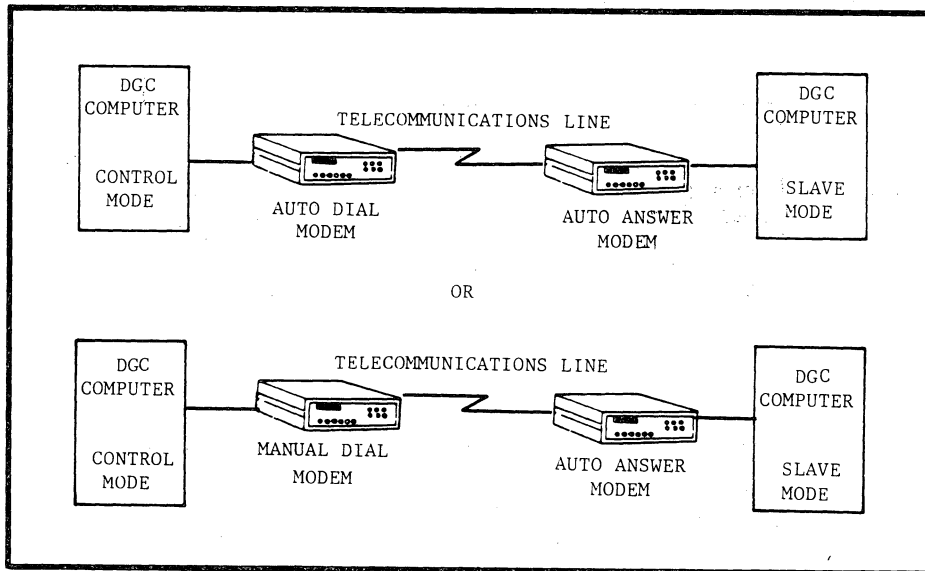


Figure 1-4. Switched Communications Lines

Dedicated Lines

Dedicated lines offer a continually open link between stations. Since the line is always enabled, data sets on a dedicated line are always ready to send or receive data. Using a dedicated line you can transmit at any time.

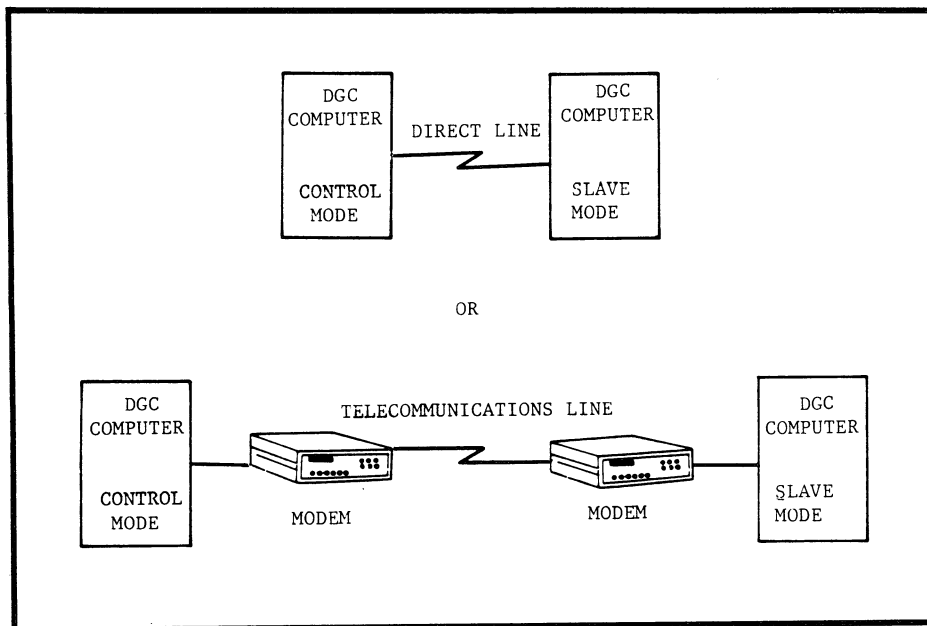


Figure 1-5. Dedicated Communications Lines

CHAPTER 2

HOW TO LOAD DG/XAP

This chapter describes how to load the DG/XAP file transfer utility from the release media to your DGC computer.

To load DG/XAP into your computer, first make sure the DG/XAP release tape or diskette is correctly mounted on the tape drive or in the diskette drive depending on the type of hardware you are using.

NOTE:

Your operating system must be generated with the following line characteristics: 8 data bits, 1 stop bit, and modem control.

Next, load the appropriate files using the following command:

LOAD/V/D

DG/XAP FILES

If your system is running under an AOS or AOS/VS operating system, load the following files:

| <u>FILE NO.</u> | <u>FILENAME</u> |
|-----------------|---|
| 0 | RELEASE NOTICE |
| 1 | XAP.PR XAP.ST XAP.OL XAPERMES XAPGEN.PR |

If your system is running under an ECLIPSE RDOS operating system,
load the following files:

| <u>FILE NO.</u> | <u>FILENAME</u> |
|-----------------|---|
| 0 | RELEASE NOTICE |
| 1 | XAP.SV XAP.ST XQP.OL XAPERMES XAPGEN.SV |

After you load the files you must generate a version of DG/XAP tailored
to your system. Chapter 3, HOW TO GENERATE DG/XAP, discusses the program
generation process.



CHAPTER 3

HOW TO GENERATE DG/XAP

Before using the DG/XAP file transfer utility, you must generate a version of DG/XAP specifically tailored to your system. This chapter describes the program generation process.

To generate DG/XAP, you execute the generation program, XAPGEN, then answer the questions displayed by the program. The questions displayed by DG/XAP are the same on AOS, AOS/VS, and RDOS operating systems. The options available are discussed later in this chapter.

PREPARING FOR GENERATION

Before executing XAPGEN, gather the information listed below.

- The baud rate of the communications line linked to your system
- The communications line type (either direct or dial)
- The modem type (either Codex or Hayes)
- The line filename (for AOS or AOS/VS - the console number, for RDOS - the ULM or ALM line number)

GENERATION DIALOGUE

The DG/XAP generation program (XAPGEN) prompts you to enter the communications characteristics for your system. When you run XAPGEN the program creates the XAP.GN file which contains the characteristics you specify for your system. You may edit the XAP.GN file to add communications lines to your system or to change the characteristics of an existing communications line. You may also delete a communications line from the XAP.GN file.

Each prompt displayed by the XAPGEN program includes a default response. The default response is displayed enclosed in brackets following the question. Default responses represent the most common communications settings. To specify a default response, press the New Line (NL) key if your system is running under an AOS or AOS/VS operating system. Press the Carriage Return (CR) key if your system is running under an RDOS operating system. When you enter a response that is not within the acceptable range of responses for the question, the generation program repeats the question.

If you make a typing error or inadvertently press NL or CR (causing the generation program to accept a default value for the current question), you can continue the session and correct the error after the session is complete.

To call the XAPGEN program, type

X XAPGEN if your system is running under an AOS or AOS/VS operating system

XAPGEN if your system is running under an RDOS operating system

Creating the Program Generation File

When you call the XAPGEN program, the first question is:

EDIT XAP.GN [Y]? (Y,N)

XAP.GN is the name of the file DG/XAP creates during the generation process. This file contains the communications characteristics you specify for your system.

If you have already run the XAPGEN program and thus created the XAP.GN file, press NL (CR) to accept the default value (yes) and follow the instructions for EDITING THE PROGRAM GENERATION FILE which are included later in this chapter.

If you are running the XAPGEN program for the first time, type N (no). The generation program then displays the following question.

(RE)CREATE XAP.GN [Y]? (Y/N)

Press NL (CR) to accept the default response (yes) and create the XAP.GN file.

KEY PROTECTION [N]? (Y/N)

Key protection means that when your system is running DG/XAP in slave mode, the system running in Control Mode must supply the correct key to your system before DG/XAP executes commands.

To generate your system WITHOUT key protection, press NL or CR to accept the default value (no).

To generate your system with key protection, type Y (yes). The program displays the following prompt:

ENTER KEY:

Type the key. The key may contain up to 32 ASCII characters. The key may contain any printable ASCII character except a comma, a space, or a tab.

LOGICAL LINE: n

DG/XAP assigns and displays a sequential logical line number beginning with 1.

BAUD RATE [1200] (19200, 9600, 4800, 2400, 1200, 600, 300, 150, 110, 75)

Type the baud rate of the communications line or press NL (CR) to accept the default value (1200).

LINE TYPE [DIAL]? (DIRECT, DIAL)

Type DIRECT if the communications line linked to your system is a direct line. If the communications line linked to your system is a switched line, press NL (CR) to accept the default value (DIAL).

NOTE: If your DGC system is connected to another DGC system by a dedicated line with an auto-dial modem, choose DIAL. If the modem does not have auto-dial capabilities, choose DIRECT.

If you chose DIAL for line type, the generation program asks the following question.

MODEM TYPE [CODEX]? (CODEX, HAYES)

If your modem is a CODEX modem, press NL (CR) to accept the default value. If your modem is a HAYES modem, type HAYES.

LINE FILENAME [@CONxx] or [@QTYxx]?

If your system is running under AOS or AOS/VS, the default value is @CONxx, where xx represents the console number.

If your system is running under RDOS, the default value is @QTYxx, where xx represents the ULM or ALM line number.

Type the console number or the line number.

RETRY COUNT [2]?

The retry count is the number of times DG/XAP will try to transmit a file if a transmission error occurs. The range for this response is 1-10.

Press NL (CR) to accept the default value (2) or type a number from 1 to 10.

REDIAL COUNT [1]?

The redial count is the number of times DG/XAP will try to redial the line if the line is disconnected. The range for this response is 1-10.

Press NL (CR) to accept the default value (1) or type a number from 1 to 10.

TIMEOUT COUNT [10]? (SECONDS)

The timeout count is the length of time DG/XAP waits for a response from the remote site before entering its own error recovery procedures. (These recovery procedures include retransmitting the last block of data or the last character acknowledging receipt of data by the remote station and waiting the specified amount of time again.) For data transmissions DG/XAP must receive acknowledgment from the remote site for every transmission before it transmits again.

If DG/XAP does not receive acknowledgment for a transmission in the specified time, a TIMEOUT error message is displayed.

Type the number of seconds you want to specify as the timeout value or press NL (CR) to accept the default timeout value (10 seconds).

COMMAND?

The generation process is now complete for the first communications line.

You may choose one of the following responses to this prompt.

- . If you made a typing error while entering responses to the generation program prompts, type CHANGE at this prompt. The program displays:

WHICH LINE

Type the logical line number (if you have defined the first communications line the number is 1). The program then displays each prompt again and you can make the appropriate changes.

- . If your system contains more than one communications line, type ADD to begin the generation dialogue for the next communications

line. The program will assign the next sequential logical line number and display the BAUD RATE prompt. Enter the characteristics for the communications line.

- If your system contains only one communications line, type BYE to complete the generation process and return to the CLI prompt. You can now execute the DG/XAP file transfer utility. (Refer to Chapter 5, HOW TO OPERATE DG/XAP.)

Editing the Program Generation File

To change the values in an existing XAP.GN file, type Y in response to the EDIT XAP.GN prompt. The generation program then displays the following prompt:

COMMAND?

You can then use the commands described in Table 3-1 to edit the XAP.GN file.

Table 3-1. Commands Used to Edit the XAP.GN File

| COMMAND | DESCRIPTION |
|---------|---|
| ADD | Add a communications line to the system |
| CHANGE | Change the characteristics of a communications line |
| DELETE | Delete the characteristics of a communications line |
| KEY | Add or delete key protection |
| LIST | List the characteristics for each communications line |
| BYE | End the generation program |
| HELP | Display these commands on your console |

ADD

Use this command to add another communications line to your system. After you enter this command, the system displays the prompt:

BAUD RATE [1200] (19200, 9600, 4800, 2400, 1200, 600, 300, 150, 110, 75)

Follow the instructions for CREATING THE PROGRAM GENERATION FILE.

CHANGE

Use this command to change the characteristics you entered for a communications line. The program displays the prompt:

WHICH LINE

Type the logical line number. The program displays each characteristic for the line beginning with the baud rate. Press NL (CR) through the prompts to display the characteristics you want to change.

DELETE

Use this command to delete a communications line and all its associated information from the XAP.GN File. The program displays the prompt:

WHICH LINE

Type the logical line number. The program deletes the line from the XAP.GN file and returns to the COMMAND prompt.

KEY

Use this command to add or delete key protection. The program displays the prompt:

KEY PROTECTION [N]? (Y/N)

To delete key protection, press NL (CR). The program then returns to the COMMAND prompt.

To add key protection, type Y (yes). The program then displays the following prompt:

ENTER KEY:

Type the key. The program then returns to the COMMAND prompt.

LIST

Use this command to list the characteristics of all the communications lines in the XAP.GN file. When you enter this command the program displays the information shown in Figure 3-1, Sample XAPGEN LIST Display.

```
+-----+
| COMMAND? LIST
|
| KEY PROTECTION: NO
|
| LOGICAL   BAUD   LINE   MODEM   LINE
|  LINE     RATE   TYPE   TYPE    FILENAME  RETRY   REDIAL  TIMEOUT
|  =====  =====  =====  =====  =====  =====  =====
|    1       1200   DIAL   CODEX   @CON01    2       1       30
|
+-----+
```

Figure 3-1. Sample XAPGEN LIST Display

BYE

Use this command to end the DG/XAP program generation session. The program writes all the information you entered to the XAP.GN file and returns to the CLI prompt.

HELP

Use this command to display a description of these commands on your console.

CHAPTER 4

DG/XAP COMMANDS

This chapter describes the commands supported by DG/XAP.

It describes the commands used to send and receive files, to monitor program operation, and to run the program without operator intervention.

DG/XAP COMMANDS

This chapter describes the commands supported by DG/XAP. The commands are used to send and receive files, to monitor program operation, and to run the program without operator intervention.

There are two types of DG/XAP commands: commands that DG/XAP executes immediately (Interactive Commands), and commands that DG/XAP queues for execution after a series of commands are entered (Queued Commands).

Interactive Commands

Interactive commands are commands you enter to direct the execution of DG/XAP, such as, SLAVE LINE and STOP, or commands you enter to display the status of a communications line, such as STATUS. DG/XAP executes interactive commands immediately. Certain interactive commands may be entered from either the remote system or the local system.

Queued Commands

Queued commands are a series of commands that you enter in a group called a CONTROL UNIT. A CONTROL UNIT consists of a series of commands that you enter one at a time and that are processed by the computer as a single unit. A Control Unit begins with the CONTROL command and ends with the END CONTROL command. DG/XAP supports five versions of the CONTROL command which allow you to tailor the Control Unit to a specific communications line. Table 4-2 gives a brief description of each version of the CONTROL command.

When you enter a Control Unit, DG/XAP assigns the Control Unit a sequence number, places it in the Control Unit queue, then executes it on the first communications line that becomes available. This process is shown in Figure 4-1.

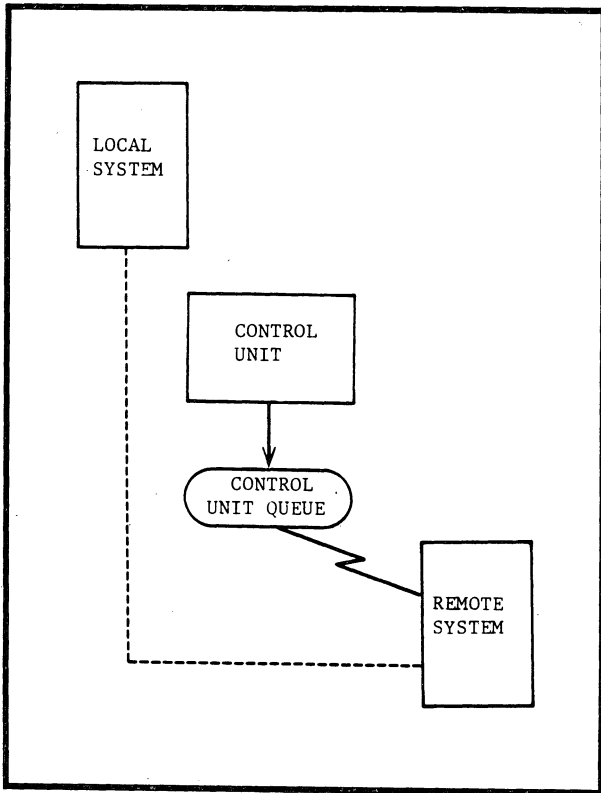


Figure 4-1. Control Unit Execution

Figure 4-2 shows an example of a Control Unit. The unit consists of commands that direct the remote system to transfer a file to the local system.

```
+-----+  
|               |  
|      CONTROL  |  
| MOVE REMOTE  |  
| FILE1 TO    |  
| LOCAL FILE1 |  
| END CONTROL  |  
|               |  
+-----+
```

Figure 4-2. Sample Control Unit

NOTE: You must always begin a Control Unit with one version of the CONTROL command and end it with the END CONTROL command. If you enter an invalid command while entering commands in a Control Unit, DG/XAP displays an error message. To correct the error, type ERASE and re-enter all the commands in the Control Unit.

Using Interactive and Queued Commands

All commands that initiate activity between the local system and the remote system are issued from the local system. The remote system can issue only those commands that control the slave line or display status information. Table 4-1 shows the DG/XAP commands that can be issued from the remote system, the interactive commands that can be issued from the local system, and the queued commands that can be issued from the local system.

Table 4-1. Interactive and Queued Commands

| COMMAND | INTERACTIVE | | QUEUED |
|-----------------------|---------------|--------------|------------------------|
| | REMOTE SYSTEM | LOCAL SYSTEM | CONTROL UNIT (LOC SYS) |
| @COMMANDFILE | | X | |
| AUDIT | X | X | X |
| CANCEL | | X | X |
| CONTROL | | | X |
| DELETE | | | X |
| DIAL | | | X |
| END CONTROL | | | X |
| ERASE | | | X |
| ERROR ABORT | | | X |
| ERROR WARNING | | | X |
| HALT | X | | |
| HOLD | | X | X |
| KEY | | | X |
| LIST | | | X |
| LOG | X | X | X |
| MOVE | | | X |
| NAME | | | X |
| NOLOG | X | X | X |
| NORESTART | | | X |
| QUEUE | X | X | X |
| RENAME | | | X |
| SCREEN ON OR OFF | | | X |
| SLAVE LINE | X | | |
| STATUS | X | X | X |
| STOP | X | X | |
| TRIES | | | X |
| UNHOLD | | X | X |
| USERNAME AND PASSWORD | | | X |
| WAIT UNTIL | | | X |

Command Files

A command file is a series of commands you enter in a file. You can create command files to direct DG/XAP to perform some function. Typically, a command file contains a complete Control Unit. If you create a command file containing a complete Control Unit, you can then enter the name of the file from the DG/XAP prompt to direct DG/XAP to execute the commands in the file.

You may create a series of command files, then combine the files into one command file. For example, if your company is composed of one central location and four branch locations, you can create a command file for each branch directing DG/XAP to move the daily transactions file from the branch to the central location. Then you can combine the files into one file and each evening just enter the name of the file to direct DG/XAP to move the daily transactions files from each branch to the central location.

You enter commands in a command file using a text editor, such as SED or SPEED, or using the CLI CREATE command with the /I switch. You assign a name to the command file, then you direct DG/XAP to execute the commands in the file by entering @commandfile from the DG/XAP prompt. You may enter comments in the command file by entering a semi-colon (;) in the first column of the line. Figure 4-3 shows a sample command file which contains commands directing DG/XAP to move the file DAILYTRANS from the remote system to the local system.

```
+-----+
| ;CMDFILE1
| ;
| ;THIS FILE TRANSFERS THE DAILY TRANSACTION
| ;FILE FROM STORE 1200 TO CENTRAL
| ;
| CONTROL/DIAL
| DIAL 2015551234
| WAIT UNTIL 2:00
| MOVE REMOTE DAILYTRANS TO LOCAL DAILYTRANS
| END CONTROL
+-----+
```

Figure 4-3. Sample command file

By using this commandfile, you could execute DG/XAP at 5:00 pm, enter @CMDFILE1 from the DG/XAP prompt, leave the system unattended, and at 2:00 a.m. DG/XAP would transfer the file DAILYTRANS from the remote system to the local system.

Entering commands in IPC (Interprocess Communication) mode

If your system is operating in IPC mode, you can enter DG/XAP commands using standard IPC command formats. For example, to execute a commandfile, enter

CONTROL @XAP @commandfile

Summary of DG/XAP Commands

Table 4-2 describes the commands supported by DG/XAP and gives a brief description of each. For a detailed description of DG/XAP commands, refer to Chapter 6, Dictionary of Commands.

Table 4-2. Summary of DG/XAP Commands

| Command | Description |
|-----------------------------|--|
| @commandfile | Tells DG/XAP to begin taking commands from the specified file. After executing all the commands in the file, DG/XAP returns to the previous mode |
| AUDIT filename | Renames the current DG/XAP audit file |
| CANCEL sequence-number | Cancels the specified Control Unit |
| CONTROL | Starts a Control Unit indicating that the Control Unit may be scheduled to run on any available dedicated line |
| CONTROL BAUD baud-rate | Starts a Control Unit indicating that the Control Unit may be scheduled to run on any dedicated line with the specified baud rate |
| CONTROL LINE | Starts a Control Unit indicating that the Control Unit must be scheduled to run on the specified communications line |
| CONTROL/DIAL | Starts a Control Unit indicating that the Control Unit must be scheduled to run on a switched line |
| CONTROL/DIAL BAUD baud-rate | Starts a Control Unit indicating that the Control Unit must be scheduled to run on a switched line with the specified baud rate |
| DELETE LOCAL pathname | Deletes one or more files on the local system |
| DELETE REMOTE pathname | Deletes one or more files on the remote system |
| DIAL phone-number | Directs DG/XAP to dial the specified phone number |
| END CONTROL | Ends the Control Unit |
| ERASE | Erases all commands in the current Control Unit |

Table 4-2 (cont.)

| Command | Description |
|---|--|
| ERROR ABORT | Indicates that if a file error occurs during execution of the Control Unit, a message will be displayed on the screen and execution of the Control Unit will stop |
| ERROR WARNING | Indicates that if a file error occurs during execution of the Control Unit, a message will be displayed on the screen and execution of the Control Unit will continue |
| HALT LINE line-number | Disables the specified slave line after the slave line is released by the current Control Unit |
| HOLD sequence-number | Puts a temporary hold on the specified queued Control Unit |
| KEY key-name | Passes the KEY to the slave line. This command is required if the remote system was GENned with key protection |
| LIST LOCAL pathname | Displays names of files residing on the local system that match the specified pathname |
| LIST REMOTE pathname | Displays names of files residing on the remote system that match the specified pathname |
| LOG filename | Logs DG/XAP communications information to the specified file |
| MOVE LOCAL pathname TO REMOTE pathname | Moves one or more files from a given directory on the local system to a given directory on the remote system |
| MOVE REMOTE pathname TO LOCAL pathname | Moves one or more files from a given directory on the remote system to a given directory on the local system |
| NAME control-unit-name | Allows you to associate a name with a Control Unit. (This name is not used for Control Unit execution. It is used for easy reference to the Control Unit when you display the queue status.) |

Table 4-2 (cont.)

| Command | Description |
|---------------------------------------|--|
| NOLOG | Terminates logging |
| NORESTART | Indicates that the Control Unit should not be restarted if a system or program failure occurs |
| QUEUE | Displays the current status of the Control Unit queue |
| RENAME LOCAL pathname TO pathname | Renames one or more files on the local system |
| RENAME REMOTE pathname TO pathname | Renames one or more files on the remote system |
| SCREEN ON or OFF | Turns on or off screen display of all system status messages (except fatal error messages) pertaining to the Control Unit. Default value is SCREEN ON. |
| SLAVE LINE line-number | Indicates that the specified communications line should enter slave mode |
| STATUS | Displays the status of all communications lines |
| STOP | If entered from the remote system, HALTS all open slave lines after the current Control Unit is executed, then terminates DG/XAP. If entered from the local system, terminates DG/XAP after the current Control Unit is executed |
| TRIES = number-of-tries | Allows you to specify the maximum number of times a line may be redialed if the line is lost |
| UNHOLD sequence-number | Releases a queued Control Unit that has been held so that it may be scheduled for execution |

Table 4-2 (cont.)

| Command | Description |
|--|--|
| USERNAME username PASSWORD password | Passes the username and password to the remote system. This command is required if the remote system is an AOS or AOS/VS system. If you do not enter a username and password, DG/XAP defaults to the username and password you used to log on to the local system. |
| WAIT UNTIL date and time | Schedules the current Control Unit for execution at the date and time you specify |



CHAPTER 5

HOW TO OPERATE DG/XAP

This chapter explains how to execute DG/XAP, how to transfer files, and how to terminate DG/XAP.

EXECUTING DG/XAP

To set up two DGC sites for communication, you must have DG/XAP loaded and running at each site. The commands necessary to execute DG/XAP from the local system and the remote system are described below.

REMOTE SYSTEM

To execute DG/XAP in Slave Mode, enter the following commands:

For an AOS or AOS/VS system:

```
+-----+
| X XAP   |
| SLAVE LINE line-number |
+-----+
```

For an RDOS system:

```
+-----+
| XAP     |
| SLAVE LINE line-number |
+-----+
```

Your remote system is now running DG/XAP in slave mode, waiting to receive commands from the local system running DG/XAP in Control Mode.

LOCAL SYSTEM

To execute DG/XAP in Control Mode, enter the following command:

For an AOS or AOS/VS system:

```
+-----+
| X XAP   |
+-----+
```

For an RDOS system:

```
+-----+
| XAP     |
+-----+
```

Your local system is now running DG/XAP in Control mode and you may enter commands to initiate file transfer between the remote system and the local system.

TRACKING SYSTEM OPERATION

DG/XAP provides an audit feature that allows you to track your day-to-day DG/XAP operation. The audit feature writes all commands entered at and all messages displayed on your console to a file named XAPAUDIT. You can use the information in the audit file to track unattended operations and to determine whether DG/XAP is functioning properly.

DG/XAP creates an audit file on both the local system and the remote system.

TRANSFERRING FILES

To transfer files between the local and remote systems, you enter commands from the local system. The commands you enter must be entered in a Control Unit. You can enter a Control Unit from the DG/XAP prompt or you can enter a Control Unit in a command file which you execute by entering the command file name from the DG/XAP prompt.

Transferring Files over a Dedicated Line

To transfer files over a dedicated line, begin the Control Unit with one of the following commands: CONTROL, CONTROL BAUD, or CONTROL LINE. CONTROL directs DG/XAP to execute the Control Unit on the first available dedicated line. CONTROL BAUD allows you to specify the baud rate of the line. CONTROL LINE allows you to specify the line number. Figure 5-1 shows a sample Control Unit that directs DG/XAP to transfer files over a given dedicated line.

```
+-----+
|          CONTROL LINE 1          |
|          MOVE REMOTE FILEA TO    |
|          LOCAL FILEA             |
|          END CONTROL             |
+-----+
```

Figure 5-1. File Transfer Over a Dedicated Line

Transferring Files over a Switched Line

To transfer files over a switched line without an auto-dial modem, manually dial the remote system and establish the connection for DG/XAP. You can then enter Control Units or command files. (You enter commands in the Control Unit just as you would enter commands to transfer files over a dedicated line. Refer to Figure 5-1.) DG/XAP will queue the Control Units for execution.

To transfer files over a switched line with an auto-dial modem, begin the Control Unit with one of the following commands: CONTROL/DIAL or CONTROL/DIAL BAUD. CONTROL/DIAL directs DG/XAP to execute the Control Unit on a switched line with an auto-dial modem. CONTROL/DIAL BAUD allows you to specify the baud rate of the line.

The next command you enter in the Control Unit is the DIAL command, which specifies the number of the modem. The DIAL command must be the second command entered in the Control Unit. If you enter the DIAL command in a different position within the Control Unit, DG/XAP will not execute the

Control Unit. Figure 5-2 shows a sample Control Unit that directs DG/XAP to execute the Control Unit over a switched line with an auto-dial modem.

```
+-----+
| CONTROL/DIAL
| DIAL 2015551234
| MOVE REMOTE FILEA TO LOCAL FILEA
| END CONTROL
+-----+
```

Figure 5-2. File Transfer Over a Switched Line

Confirmation of File Transfer

After DG/XAP executes the Control Unit, DG/XAP confirms that the file transfer was performed by displaying the following message on your console:

```
MOVE REPORT
FROM filename
TO filename
```

If DG/XAP was unable to perform the file transfer, an error message is displayed. For example, if you try to move a file that does not exist, DG/XAP displays:

```
MOVE REPORT
FILE DOES NOT EXIST
```

DG/XAP also displays a confirmation message when you DELETE, RENAME, or LIST files.

TERMINATING DG/XAP

To terminate DG/XAP, enter STOP from the DG/XAP prompt. When you enter STOP from the local system, DG/XAP terminates after the current Control Unit is executed. When you enter STOP from the remote system, DG/XAP issues a HALT to all open communications lines after the current Control Unit is executed. Then DG/XAP terminates.

You may only terminate DG/XAP on the system on which it was executed. You cannot terminate DG/XAP on the remote side by issuing the STOP command from the local system.

CHAPTER 6

DICTIONARY OF COMMANDS

This chapter describes each command supported by DG/XAP.

This chapter describes each command supported by DG/XAP. The following information is given for each command:

- . The format in which you must enter the command
- . The mode in which you can enter the command is shown in the upper right corner in the following format:

| | |
|---------------------|---|
| command description | REMOTE LOCAL CTRL UNIT |
|---------------------|---|

REMOTE = You can enter the command from the remote system in interactive mode

LOCAL = You can enter the command from the local system in interactive mode

CTRL UNIT = You can enter the command from the local system in queued mode, that is, the command must be entered in a Control Unit

- . The argument that you must enter in the command line, if applicable
- . The switches you may enter in the command line, if applicable
- . Examples of the command

The commands that allow you to manipulate files (DELETE, LIST, MOVE, RENAME) accept the pathname of a file as an argument. If the file resides in your working directory, enter the filename only.

You may use templates in the pathname argument. A template is a character that DG/XAP interprets symbolically rather than literally. A template can be used in certain commands. For example, you can enter the command LIST REMOTE AP+ to direct DG/XAP to list all files residing on the remote system that begin with the characters AP. Valid template characters are shown in Table 6-1.

Table 6-1. Template Characters

| TEMPLATE CHARACTER | WHAT IT DOES |
|--------------------|--|
| * (asterisk) | Matches any single character except a period |
| - (hyphen) | Matches any character string that does not contain a period, including a null string |
| + (plus sign) | Matches any character string, including strings with a period and null strings |

@commandfile

Direct DG/XAP to begin taking commands from a given file. **LOCAL**

FORMAT

@commandfile

DESCRIPTION

The @commandfile command directs DG/XAP to begin taking commands from the specified file. A command file is a series of commands you enter in a file using a text editor, such as SED or SPEED, or using the CLI CREATE command with the /I switch. The file may contain a complete Control Unit, a series of commands, or a single command.

The commands may be nested up to 4 levels. After DG/XAP has taken all the commands from the file, DG/XAP returns to the previous mode.

ARGUMENTS

| | |
|-------------|---|
| commandfile | The name of a text file containing commands |
|-------------|---|

EXAMPLES

The file ENDDAY contains the following commands:

```
CONTROL
RENAME REMOTE TRANS TO OLDTRANS
MOVE LOCAL TRANS TO REMOTE TRANS
END CONTROL
```

To direct DG/XAP to accept the commands in the file ENDDAY, type

@ENDDAY

DG/XAP will accept the commands in the file ENDDAY and schedule the Control Unit for execution.

The file CALLVIRGINIA contains the following commands:

CONTROL/DIAL
DIAL 2015558765
KEY SECRET

To direct DG/XAP to accept the commands in the file CALLVIRGINIA, type

@CALLVIRGINIA

DG/XAP will accept the commands in the file CALLVIRGINIA. You can then enter other commands in the Control Unit.

AUDIT

Rename the XAPAUDIT file.

REMOTE
LOCAL
CTRL UNIT

FORMAT

AUDIT filename

DESCRIPTION

The AUDIT command renames the current DG/XAP audit file. When DG/XAP is executed, all system activity messages are written to a file named XAPAUDIT. This file will continue to grow indefinitely if you do not rename or delete it. When you use this command to rename the audit file, DG/XAP closes the audit file and renames the file to the name you specify. DG/XAP then creates a new, empty audit file named XAPAUDIT and begins to write all system activity messages to this file.

You can delete the renamed audit file or retain it for future reference.

ARGUMENTS

filename

The name you want to
assign to the existing
audit file

EXAMPLE

To rename XAPAUDIT to XAPAUDIT.52083, type

AUDIT XAPAUDIT.52083

CANCEL

Cancel a queued Control Unit.

**LOCAL
CTRL UNIT**

FORMAT

CANCEL sequence-number

DESCRIPTION

The CANCEL command removes a Control Unit from the Control Unit Queue. DG/XAP deletes the Control Unit so that it will not be executed. You may not CANCEL an active Control Unit.

ARGUMENTS

sequence-number

The sequence number of a queued Control Unit

EXAMPLES

To cancel Control Unit 100, type

CANCEL 100

CONTROL

Start a Control Unit.

CTRL UNIT

FORMAT

CONTROL

DESCRIPTION

The CONTROL command starts a Control Unit. All Control Units must start with one version of the CONTROL Command (refer to CONTROL BAUD, CONTROL/DIAL, CONTROL/DIAL BAUD, and CONTROL LINE for a description of the other versions of the CONTROL Command). The CONTROL command indicates that the Control Unit can be executed on any available dedicated line.

ARGUMENTS

None

EXAMPLES

To start a Control Unit to be executed on any available direct line, type

CONTROL

CONTROL BAUD

Start a Control Unit on a line with a given baud rate. **CTRL UNIT**

FORMAT

CONTROL BAUD baud-rate

DESCRIPTION

CONTROL BAUD is one version of the CONTROL Command used to start a Control Unit. This command indicates that the Control Unit can be executed on any dedicated line with the baud rate you specify.

ARGUMENTS

baud-rate The baud rate of a line on which the
Control Unit will be executed

EXAMPLES

To start a Control Unit to be executed on a line with a baud rate of 1200, type

CONTROL BAUD 1200

CONTROL LINE

Start a Control Unit on a given line.

CTRL UNIT

FORMAT

CONTROL LINE line-number

DESCRIPTION

CONTROL LINE is one version of the CONTROL Command used to start a Control Unit. This command indicates that the Control Unit must be executed on the dedicated line you specify.

ARGUMENTS

line-number

The number of the line
on which you want to execute
the Control Unit

EXAMPLES

To start a Control Unit to be executed on line 1, type

CONTROL LINE 1

CONTROL/DIAL

Start a Control Unit to be executed on
a switched line.

CTRL UNIT

FORMAT

CONTROL/DIAL

DESCRIPTION

CONTROL/DIAL is one version of the CONTROL Command used to start a Control Unit. This command indicates that the Control Unit can be executed on a switched line only.

ARGUMENTS

None

EXAMPLES

To start a Control Unit to be executed on a switched line, type

CONTROL/DIAL

CONTROL/DIAL BAUD

Start a Control Unit to be executed on a switched line with a given baud rate

CTRL UNIT

FORMAT

CONTROL/DIAL BAUD baud-rate

DESCRIPTION

CONTROL/DIAL BAUD is one version of the CONTROL Command used to start a Control Unit. This command indicates that the Control Unit must be executed on a switched line with the baud rate you specify.

ARGUMENTS

baud-rate

The baud rate of a line on which the Control Unit will be executed

EXAMPLES

To start a Control Unit to be executed on a switched line with a baud rate of 1200, type

CONTROL/DIAL BAUD 1200

DELETE LOCAL

Delete one or more files on the local system.

CTRL UNIT

FORMAT

DELETE LOCAL pathname

DESCRIPTION

The DELETE LOCAL command deletes one or more files from a given directory on the local system. To delete a file, type the pathname of the file.

ARGUMENTS

| | |
|----------|--|
| pathname | The pathname of a file on the local system |
|----------|--|

EXAMPLES

To delete the file FILE1 that resides in your working directory on the local system, type

DELETE LOCAL FILE1

To delete all files starting with TRANS that reside in your working directory on the local system, type

DELETE LOCAL TRANS+

DELETE REMOTE

Delete one or more files on the remote system.

CTRL UNIT

FORMAT

DELETE REMOTE pathname

DESCRIPTION

The DELETE REMOTE command deletes one or more files from a given directory on the remote system.

ARGUMENTS

| | |
|----------|---|
| pathname | The pathname of a file on the remote system |
|----------|---|

EXAMPLES

To delete the file FILE1 that resides in your working directory on the remote system, type

DELETE REMOTE FILE1

To delete all files starting with TRANS that reside in your working directory on the remote system, type

DELETE REMOTE TRANS+

DIAL

Dial a given phone number.

CTRL UNIT

FORMAT

DIAL phone-number

DESCRIPTION

The DIAL command directs DG/XAP to dial a given number. DG/XAP dials the number and establishes the connection with the modem on the remote system.

You should enter this command in the Control Unit immediately after the CONTROL/DIAL command. If you enter the DIAL command after a Control Unit command (such as RENAME, MOVE, etc.) then DG/XAP will treat this command as a syntax error and reject the Control Unit.

ARGUMENTS

phone-number

The phone number of the
modem on the remote system

EXAMPLES

To dial a line on the remote system with the phone number 2015551234,
type

DIAL 2015551234

END CONTROL

Terminate a Control Unit.

CTRL UNIT

FORMAT

END CONTROL

DESCRIPTION

The END CONTROL command terminates a Control Unit. Use this command to terminate a Control Unit begun with one version of the CONTROL command.

ARGUMENTS

None

EXAMPLES

To terminate a Control Unit, type

END CONTROL

ERASE

Erase the commands in the current Control Unit.

CTRL UNIT

FORMAT

ERASE

DESCRIPTION

The ERASE command causes the current Control Unit to disregard all commands you have typed in the Control Unit. Use this command if you make a mistake while entering commands in a Control Unit.

After you type ERASE, you may type the CONTROL command and re-enter the Control Unit.

+-----+
| NOTE: |
+-----+

If you make a mistake while entering commands in a Control Unit, DG/XAP will display an error message, such as INVALID COMMAND SYNTAX. You must type ERASE and re-enter all the commands in the Control Unit. DG/XAP will not execute a Control Unit containing an invalid command.

ARGUMENTS

None

EXAMPLES

To direct DG/XAP to disregard all commands entered in the current Control Unit, type

ERASE

ERROR ABORT

Terminate a Control Unit if a file error occurs.

CTRL UNIT

FORMAT

ERROR ABORT

DESCRIPTION

The ERROR ABORT command is one of two methods of handling file errors that occur during execution of a Control Unit.

Use the ERROR ABORT command to direct DG/XAP to terminate the Control Unit if a file error occurs during execution of the Control Unit. DG/XAP will display an error message, then stop executing the Control Unit. DG/XAP then resets the value to ERROR WARNING, which is the default value.

ARGUMENTS

None

EXAMPLES

To direct DG/XAP to terminate the Control Unit if a file error occurs, type

ERROR ABORT

ERROR WARNING

Continue a Control Unit if a file error occurs.

CTRL UNIT

FORMAT

ERROR WARNING

DESCRIPTION

The ERROR WARNING command is one of two methods of handling file errors that occur during execution of a Control Unit.

Use the ERROR WARNING command if you want DG/XAP to continue executing the Control Unit if a file error occurs. DG/XAP will display an error message and continue executing the Control Unit.

DG/XAP defaults to this method of error handling when executing a Control Unit.

ARGUMENTS

None

EXAMPLES

To direct DG/XAP to continue executing the Control Unit if a file error occurs, type

ERROR WARNING

HALT LINE

Disable a Slave line.

REMOTE

FORMAT

HALT LINE line-number

DESCRIPTION

The HALT LINE command directs DG/XAP to disable the specified Slave line after the Slave line is released by the current Control Unit.

ARGUMENTS

line-number

The line number of the
Slave line you want to
disable

EXAMPLES

To disable Slave line 1 after the current Control Unit is executed,
type

HALT LINE 1

HOLD

Put a temporary hold on a Control Unit.

**LOCAL
CTRL UNIT**

FORMAT

HOLD sequence-number

DESCRIPTION

The HOLD command puts a temporary hold on the specified Control Unit. When you want to execute a Control Unit that has been held, use the UNHOLD command.

ARGUMENTS

sequence-number

The sequence number of a queued Control Unit

EXAMPLES

To put a temporary hold on Control Unit 100, type

HOLD 100

KEY

Pass the KEY to the Slave System.

CTRL UNIT

FORMAT

KEY keyname

DESCRIPTION

The KEY command directs DG/XAP to pass the specified key to the remote system. This command is needed only if the remote system was GENned with key protection.

After establishing the connection with the remote system, DG/XAP passes the key to the remote system. If the keyname is valid, DG/XAP executes the Control Unit. If the keyname is invalid, DG/XAP does not execute the Control Unit.

ARGUMENTS

| | |
|---------|--|
| keyname | The name of the key on the remote system |
|---------|--|

EXAMPLES

To pass the key SECRET to the remote system, type

KEY SECRET

LIST LOCAL

Display names of files residing on the local system. **CTRL UNIT**

FORMAT

LIST LOCAL pathname

DESCRIPTION

The LIST LOCAL command displays, on the local console, names of files residing on the local system.

ARGUMENTS

pathname The pathname of a file on the local system

EXAMPLES

To display the name of the file FILE1 residing in your working directory on the local system, type

LIST LOCAL FILE1

To display the names of all files starting with TRANS residing in your working directory on the local system, type

LIST LOCAL TRANS+

LIST REMOTE

Display names of files residing on the remote system. **CTRL UNIT**

FORMAT

LIST REMOTE pathname

DESCRIPTION

The LIST REMOTE command displays, on the local console, names of files residing on the remote system.

ARGUMENTS

pathname The pathname of a file on the remote system

EXAMPLES

To display the name of the file FILE2 residing in your working directory on the remote system, type

LIST REMOTE FILE2

To display the names of all files starting with TRANS residing in your working directory on the remote system, type

LIST REMOTE TRANS+

LOG

Log DG/XAP communications information to
a given file.

REMOTE
LOCAL
CTRL UNIT

FORMAT

LOG filename

DESCRIPTION

The LOG command creates a file which logs all data transmitted and received over the communications lines. This file would not normally be used in day-to-day DG/XAP operations. (The XAPAUDIT file records all DG/XAP activity messages.) Create the LOG file if you are experiencing transmission problems. The information in the LOG file can be used by support personnel to help pinpoint the problem.

ARGUMENTS

filename

The name of the log file

EXAMPLES

To log all DG/XAP communications activity to the file LOGFILE, type

LOG LOGFILE

MOVE LOCAL TO REMOTE

Move a copy of one or more files from a given directory on the local system to a given directory on the remote system.

CTRL UNIT

FORMAT

MOVE [/switches] LOCAL pathname TO REMOTE pathname/special template

DESCRIPTION

The MOVE LOCAL TO REMOTE command moves copies of one or more files from a directory on the local system to a directory on the remote system. DG/XAP provides a special template to be used in the destination position to preserve the file's original name. The template is `!' (exclamation point). This special template is particularly useful in a command with a template in the source position.

ARGUMENTS

| | |
|------------------|---|
| pathname | The pathname of a file on the local system (source position) |
| | The pathname of the file on the remote system (destination position) |
| special template | The character `!' which indicates that the file's original name will be preserved |

SWITCHES

| | |
|---------|--|
| /DELETE | If the file already exists on the remote system, delete the existing file before moving the file |
| /RECENT | If the file already exists on the remote system, move the file only |

if it is more recent than the existing file

/APPEND

If the file already exists on the remote system, append to the existing file

```
+-----+
|               NOTE:               |
| If DG/XAP is restarted due       |
| to a system failure, the         |
| file you are APPENDING to       |
| may contain incorrect data      |
+-----+
```

EXAMPLES

To move a file named FILE1 that resides in your working directory on the local system to the same directory on the remote system, type

MOVE LOCAL FILE1 TO REMOTE FILE1

To move a file named ABCFILE that resides in the directory DZO:SMITH on the local system to the directory DZO:JONES on the remote system, type

MOVE LOCAL DZO:SMITH:ABCFILE TO REMOTE DZO:JONES:ABCFILE

The pathname of the file on the slave system will be DZO:JONES:ABCFILE

To move all files starting with TRANS that reside in the directory :UDD:SMITH on the local system to the directory :UDD:JONES on the remote system, type

MOVE LOCAL :UDD:SMITH:TRANS+ TO REMOTE :UDD:JONES:!

All the files that start with TRANS will be moved to the directory :UDD:JONES with the original filenames preserved.

MOVE REMOTE TO LOCAL

Move a copy of one or more files from a given directory on the remote system to a given directory on the local system.

CTRL UNIT

FORMAT

MOVE [/switches] REMOTE pathname TO LOCAL pathname/special template

DESCRIPTION

The MOVE REMOTE TO LOCAL command moves copies of one or more files from a directory on the remote system to a directory on the local system. DG/XAP provides a special template to be used in the destination position to preserve the file's original name. The template is '^!' (exclamation point). This special template is particularly useful in a command with a template in the source position.

ARGUMENTS

| | |
|------------------|--|
| pathname | The pathname of a file on the remote system (source position) |
| | The pathname of the file on the local system (destination position) |
| special template | The character '^!' which indicates that the file's original name will be preserved |

SWITCHES

| | |
|---------|--|
| /DELETE | If the file already exists on the local system, delete the existing file before moving the file |
| /RECENT | If the file already exists on the local system, move the file only if it is more recent than the existing file |

/APPEND

If the file already exists on the local system, append to the existing file

```
+-----+
|               NOTE:               |
| If DG/XAP is restarted due       |
| to a system failure, the         |
| file you are APPENDING to        |
| may contain incorrect data       |
+-----+
```

EXAMPLES

To move the file FILE1 that resides in your working directory on the remote system to the same directory on the local system, type

```
MOVE REMOTE FILE1 TO LOCAL FILE1
```

To move a file named ABCFILE that resides in the directory DZO:SMITH on the remote system to the directory DZO:JONES on the local system, type

```
MOVE REMOTE DZO:SMITH:ABCFILE TO LOCAL DZO:JONES:ABCFILE
```

The pathname of the file on the local system will be DZO:JONES:ABCFILE.

To move all files starting with TRANS that reside in the directory :UDD:SMITH on the remote system to the directory :UDD:JONES on the local system, type

```
MOVE REMOTE :UDD:SMITH:TRANS+ TO LOCAL :UDD:JONES:!
```

All the files that start with TRANS will be moved to the directory :UDD:JONES with the original filenames preserved.

NAME

Associate a name with a Control Unit.

CTRL UNIT

FORMAT

NAME control-unit-name

DESCRIPTION

The NAME command allows you to associate a name with the current Control Unit. The NAME command is provided so that you may easily reference the Control Unit when you display information in the Control Unit Queue. This name is **not** used to execute the Control Unit. DG/XAP assigns a sequence number to each Control Unit and the Control Unit is scheduled for execution by the sequence number.

ARGUMENTS

| | |
|-------------------|--|
| control-unit-name | The name you want to assign the Control Unit. The control-unit-name may be from 1 to 16 characters long and may not contain spaces |
|-------------------|--|

EXAMPLES

To assign the name FILETRANSFER to the current Control Unit, type

NAME FILETRANSFER

NOLOG

Terminates logging.

**REMOTE
LOCAL
CTRL UNIT**

FORMAT

NOLOG

DESCRIPTION

The NOLOG command terminates logging. DG/XAP closes the log file you created.

ARGUMENTS

None

EXAMPLES

To terminate logging, type

NOLOG

NORESTART

Do not restart the Control Unit if the system
or program fails.

CTRL UNIT

FORMAT

NORESTART

DESCRIPTION

The NORESTART command indicates that if the system or program fails, the Control Unit will not be restarted when DG/XAP is restarted. If you enter this command in a Control Unit, the Control Unit will be deleted when DG/XAP is restarted.

If you do not enter this command in a Control Unit, the Control Unit will be rescheduled for execution when DG/XAP is restarted.

ARGUMENTS

None

EXAMPLES

To indicate that you do not want the Control Unit restarted if the system or program fails, type

NORESTART

QUEUE

Display current status of the Control Unit Queue.

REMOTE
LOCAL
CTRL UNIT

FORMAT

QUEUE

DESCRIPTION

The QUEUE command displays the following information about each Control Unit in the Control Unit Queue:

- SEQUENCE NUMBER

DG/XAP assigns a sequence number to each Control Unit. The number denotes the sequence in which the Control Units in the queue will be executed.

- CONTROL UNIT NAME

If you assigned a name to the Control Unit (using the DG/XAP NAME command), the name is displayed

- FLAGS

If the Control Unit is currently executing, ACTV (active) is displayed

- WAITING FOR

The line number on which the Control Unit will be executed

ARGUMENTS

None

EXAMPLES

To display the contents of the current Control Unit Queue, type

QUEUE

Figure 6-1 shows a sample Queue display.

| Queue Display | | | |
|---------------|-------------------|------|-------------|
| Seq# | Control Unit Name | Flgs | Waiting For |
| 1 | CTRLUNIT1 | ACTV | |
| 2 | | | LINE 1 |
| 3 | | | LINE 2 |

Figure 6-1. Sample Queue Display

RENAME LOCAL

Change the name of a file on the local system.

CTRL UNIT

FORMAT

RENAME LOCAL pathname TO filename

DESCRIPTION

The RENAME LOCAL command changes the name of one or more files on the local system.

ARGUMENTS

pathname The pathname of a file on
 the local system

filename The new filename

NOTE: The only valid template
for this command is a '+'

EXAMPLES

To rename the file TRANS residing in your working directory
on the local system to OLDTRANS, type

RENAME LOCAL TRANS TO OLDTRANS

To rename all files residing in your working directory on the local
system that start with TRANS to OLDTRANS, type

RENAME LOCAL TRANS+ TO OLDTRANS+

RENAME REMOTE

Change the name of a file on the remote system.

CTRL UNIT

FORMAT

RENAME REMOTE pathname TO filename

DESCRIPTION

The RENAME REMOTE command changes the name of one or more files on the remote system.

ARGUMENTS

pathname The pathname of a file on the
 remote system

filename The new filename

NOTE: The only valid template
 for this command is a '+'

EXAMPLES

To rename the file TRANS residing in your working directory on the remote system to OLDTRANS, type

RENAME REMOTE TRANS TO OLDTRANS

To rename all files residing in your working directory on the remote system that start with TRANS to OLDTRANS, type

RENAME REMOTE TRANS+ TO OLDTRANS+

SCREEN OFF

Turn off display of DG/XAP status messages
to your console.

CTRL UNIT

FORMAT

SCREEN OFF

DESCRIPTION

The SCREEN OFF command turns off the display of DG/XAP status messages to your console when the Control Unit is executed. Status messages include all DG/XAP confirmation messages and error messages (except fatal error messages). After DG/XAP executes the Control Unit, DG/XAP resets the SCREEN ON/OFF feature to its default value of SCREEN ON.

ARGUMENTS

None

EXAMPLES

To turn off the display of DG/XAP status messages to your console when the Control Unit is executed, type

SCREEN OFF

SCREEN ON

Turn on display of DG/XAP status messages
to your console.

CTRL UNIT

FORMAT

SCREEN ON

DESCRIPTION

The SCREEN ON command turns on the display of DG/XAP status messages to your console when the Control Unit is executed. SCREEN ON is the default value of the SCREEN ON/OFF feature.

ARGUMENTS

None

EXAMPLES

To turn on the display of DG/XAP status messages to your console when the Control Unit is executed, type

SCREEN ON

SLAVE LINE

Direct a given line to enter slave mode.

REMOTE

FORMAT

SLAVE LINE line-number

DESCRIPTION

The SLAVE LINE command directs the specified line to enter slave mode.

ARGUMENTS

line-number

The number of the line
you want to enter Slave mode

EXAMPLES

To direct line 2 to enter slave mode as soon as the line is free, type

SLAVE LINE 2

STATUS

Display the status of all lines.

REMOTE
LOCAL
CTRL UNIT

FORMAT

STATUS

DESCRIPTION

The STATUS command displays the status of all communications lines. The STATUS command displays the following information about each communications line:

- LINE

The line number

- TYPE

The line type: either direct or dial-up

- BAUD

The baud rate of the line

- MODE

The mode in which the line is operating: either Control Mode or Slave Mode

- ACK COUNT

The current ACK count

- NAK COUNT

The current NAK count

- COMMAND

The command which is currently being processed

- SOURCE FILENAME

The source filename currently being processed

- DESTINATION FILENAME

The destination filename currently being processed

- BYTE ADDRESS

The byte address of the block currently being processed

ARGUMENTS

None

EXAMPLES

To display the status of all control lines and slave lines, type

STATUS

Figure 6-2 shows a sample Status display.

```
+-----+
| Line Status:
|
| Line           : 1
| Type           : Direct
| Baud           : 9600
| Mode           : Control
| Ack Count      : 4
| Nak Count      : 0
| Command        : Inter-Machine Move Sending
| Source Filename: File1
| Destination Filename: File1
| Byte Address   : 128
+-----+
```

Figure 6-2. Sample Status Display

STATUS LINE

Display the status of a given line.

**REMOTE
LOCAL
CTRL UNIT**

FORMAT

STATUS LINE line-number

DESCRIPTION

The STATUS command displays the status of a specified line. For a detailed description of the information displayed, refer to the STATUS command.

ARGUMENTS

line-number

The number of the line whose status you want to display

EXAMPLES

To display the status of line 1, type

STATUS LINE 1

STOP

Terminate DG/XAP.

REMOTE
LOCAL

FORMAT

STOP

DESCRIPTION

The STOP command terminates DG/XAP. The STOP command is issued from the system that executed DG/XAP (the system running in CONTROL mode cannot terminate DG/XAP on the system running in SLAVE mode).

When you enter the STOP command, DG/XAP terminates after the current Control Unit is executed.

ARGUMENTS

None

EXAMPLES

To terminate DG/XAP, type

STOP

TRIES

Number of times a line may be redialed
if the line is disconnected.

CTRL UNIT

FORMAT

TRIES = number-of-tries

DESCRIPTION

The TRIES command indicates the number of times DG/XAP will try to redial the line if the line is disconnected. When DG/XAP redials a line, execution of the Control Unit is continued where it left off. If DG/XAP was in the middle of a file transfer, DG/XAP performs a checkpoint restart rather than retransmitting the entire file. If you do not enter the TRIES command in a Control Unit and the line is disconnected during execution of the Control Unit, DG/XAP will try to redial the line a maximum of five times.

ARGUMENTS

| | |
|-----------------|--|
| number-of-tries | The maximum number of times DG/XAP will try to redial a line if the line is disconnected |
| | Range: 1 to 32767 |
| | Default: 5 |

EXAMPLES

To direct DG/XAP to try to redial the line a maximum of ten times, type

TRIES = 10

UNHOLD

Release a Control Unit that has been held.

**LOCAL
CTRL UNIT**

FORMAT

UNHOLD sequence-number

DESCRIPTION

The UNHOLD command releases a queued Control Unit that has been held (using the HOLD command). DG/XAP then schedules the Control Unit for execution.

ARGUMENTS

sequence-number

Sequence number of a
queued Control Unit that has
been held

EXAMPLES

To release CONTROL UNIT 100 and schedule it for execution, type

UNHOLD 100

USERNAME AND PASSWORD

Supply the username and password to the remote system. **CTRL UNIT**

FORMAT

USERNAME username
PASSWORD password

DESCRIPTION

The USERNAME and PASSWORD commands direct DG/XAP to supply the username and password to the remote system. The username and password are required if the remote system is an AOS or an AOS/VS system. If you do not include these commands in the Control Unit, DG/XAP supplies the username and password you used to log on to the local system (if it is an AOS or AOS/VS system) or the username and password used to create IPC mode (if you are running DG/XAP in IPC mode).

If the username and password supplied to the remote system are valid, DG/XAP will execute the Control Unit. If the password and username are invalid, DG/XAP will not execute the Control Unit.

ARGUMENTS

| | |
|----------|--|
| username | The username you want to supply to the remote system |
| password | The password you want to supply to the remote system |

EXAMPLES

To supply the remote system the username JONES and the password TECH, type

USERNAME JONES
PASSWORD TECH

WAIT UNTIL

Schedule a Control Unit for execution
at a given date and time.

CTRL UNIT

FORMAT

WAIT UNTIL date and time

DESCRIPTION

The WAIT UNTIL command indicates that a Control Unit should not be scheduled for execution until the date and time you specify.

You may specify a date only, a time only, or both a date and time.

If you specify a date, you may enter the month and day only. DG/XAP will default to the current year. For the month and day you may enter leading zeroes or omit them.

If you specify the time, you must enter hours and minutes. DG/XAP does not supply any default values for time.

ARGUMENTS

date Date on which to schedule the
Control Unit for execution

Format: mm-dd-yy
 m-d-yy
 mm-dd
 m-d

Default: current date

time Time after which to schedule
the Control Unit for execution

Format: hh:mm

EXAMPLES

To specify a Control Unit for execution at 11:30 a.m. on February 2, 1983, type

WAIT UNTIL 02-02-83 11:30

or

WAIT UNTIL 2-2-83 11:30

or

WAIT UNTIL 2-2 11:30

To specify a Control Unit for execution at 2:00 p.m. today, type

WAIT UNTIL 14:00

APPENDIX A

STATUS AND ERROR MESSAGES

This appendix lists the status messages and error messages contained in DG/XAP alphabetically.

It shows the status messages and error messages as they appear at the console and gives explanations of the conditions that cause an error message to appear. When applicable, the explanation describes the action that you should take to correct the error.

To correct a keying error follow the directions in table A-1.

Table A-1. Correcting Keyboard Errors

| TYPE OF COMMAND | TO CORRECT AN ERROR |
|-----------------|--|
| Interactive | Re-enter the command |
| Control Unit | Type ERASE, then re-enter the Control Unit |
| Command file | Re-enter the command in the command file |

CALL ABANDONED

DG/XAP was unable to connect with the remote system. This message could be displayed because you entered the wrong phone number, because DG/XAP is not running on the remote system, or because there is problem in the phone line.

COMMAND ABBREVIATION NOT UNIQUE

Each command has a unique abbreviation. You tried to enter an abbreviation that is not unique to the command.

ACTION: Check the command abbreviation. Re-enter the command.

CONTAINS SYNTAX ERROR(S) - NOT ENQUEUED

You entered a command in the Control Unit with a syntax error. DG/XAP will not enqueue the Control Unit.

ACTION: Re-enter the Control Unit.

DIAL RETRY COUNT EXHAUSTED

DG/XAP tried to redial a line the maximum number of times that was set for redial for the Control Unit. DG/XAP will not try to dial the line again for the current Control Unit and will delete the Control Unit.

ACTION: Check the line condition.

DIRECTORY ACCESS DENIED

You tried to access a directory for which you do not have user privileges. DG/XAP will not execute the command.

EXIT SLAVE MODE ALREADY REQUESTED

You tried to HALT a line that has already been halted. Status message; no action necessary.

EXTRANEOUS ARGUMENTS IN COMMAND LINE

You tried to enter a command containing invalid arguments.

ACTION: Check the command format. Re-enter the command.

FILE ACCESS DENIED

You tried to access a file for which you do not have access privileges.

FILE DOES NOT EXIST

You entered the name of a file that does not exist.

FILE NAME ALREADY EXISTS

You tried to move or rename a file to a filename that already exists.

FILE READ ERROR

DG/XAP cannot read the file. This could occur because the file has been corrupted. Contact your system manager.

FREE ERROR IN CQUEUE

Fatal error message. Contact your system manager.

INIT - INVALID SYNTAX IN XAP.GN

DG/XAP cannot be executed because the XAP.GN file contains a syntax error. Contact your system manager.

INIT - NO LINES SPECIFIED IN XAP.GN

DG/XAP cannot be executed because no lines were defined in the XAP.GN file. Contact your system manager.

INIT - UNABLE TO ACCESS XAP.GN

DG/XAP cannot be executed because DG/XAP cannot access the XAP.GN file.
Contact your system manager.

INIT - UNABLE TO ACCESS COMMUNICATIONS LINE

On an AOS or AOS/VS system, this message indicates that the line is not defined to the system or that the line is in use.

On an RDOS system, this message indicates that QTY line is in use by the system.

INIT - UNABLE TO ALLOCATE LINE WORK AREAS

Fatal error message. Contact your system manager.

INIT - UNABLE TO START LINE DRIVER

Fatal error message. Contact your system manager.

INIT - UNABLE TO START LINE READ TASK

Fatal error message. Contact your system manager.

INCOMPLETE COMMAND LINE

You tried to enter an incomplete command. DG/XAP will not accept the command.

ACTION: Check the command format and re-enter the command.

INVALID BAUD RATE

You tried to enter an invalid baud rate. DG/XAP will not accept the command.

ACTION: Re-enter the command. See your system manager for valid baud rates.

INVALID COMMAND SYNTAX

You tried to enter an invalid command syntax. DG/XAP will not accept the command.

ACTION: Check the command format and re-enter the command.

INVALID FILE SPECIFIER

You tried to enter a filename containing a character that DG/XAP does not recognize.

ACTION: Check the filename and re-enter the command.

INVALID KEY SUPPLIED

You tried to execute a Control Unit containing an invalid key. DG/XAP will not execute the Control Unit.

ACTION: Re-enter the command using the correct key name.

INVALID MODEM CHARACTER

DG/XAP received an invalid status character from the autodialer. DG/XAP will try to retransmit the Control Unit.

INVALID SEQUENCE NUMBER

You tried to enter a Control Unit sequence number that is not in use. DG/XAP will not accept the command.

ACTION: Re-enter the command using a valid Control Unit sequence number.

LINE ALREADY IN SLAVE MODE

You tried to put a line in Slave Mode that is already in Slave Mode. Status message; no action necessary.

LINE NOT DEFINED

While running the XAPGEN program and trying to change or delete a communications line, you entered a line number that does not exist in the XAP.GN file.

ACTION: Enter an existing communications line number.

LOGGING ALREADY DISABLED

You tried to disable logging, but logging was already disabled. Status message; no action necessary.

LOGGING ALREADY ENABLED

You tried to enable logging, but logging was already enabled. Status message; no action necessary.

MISPLACED COMMAND

You tried to enter a command in the wrong position within the Control Unit. DG/XAP will not accept the command.

ACTION: Enter the command on the correct line in the Control Unit.

NO SUCH LINE

You tried to enter a line number or line type that does not exist. DG/XAP will not accept the command.

ACTION: Re-enter the command using an existing line number or line type.

NON-DIRECTORY ARGUMENT IN PATHNAME

The file you entered in the pathname was not a directory.

ACTION: Check the pathname and re-enter the command.

POSSIBLE DEAD LINE

DG/XAP is unable to transmit over the line. DG/XAP will try to redial the line the specified number of times. This message could indicate a system failure on the remote system or a line disconnection.

REMOTE BUSY

The line you dialed is busy. DG/XAP will redial the line the number of times specified for RETRY. If this fails, DG/XAP will requeue the Control Unit and try to dial again.

SEQUENCE NUMBER ACTIVE

You tried to HOLD or CANCEL an active Control Unit. DG/XAP will continue to execute the Control Unit.

SEQUENCE NUMBER HELD

You tried to HOLD a Control Unit that is already being held. Status message; no action necessary.

SEQUENCE NUMBER NOT HELD

You tried to UNHOLD a Control Unit that is not being held. Status message; no action necessary.

TIMEOUT ON READ OR WRITE

DG/XAP was waiting for a response to an initiated action and did not receive a response in the specified timeout interval. If this message occurs frequently, it could indicate that the timeout value is not set high enough. Contact your system manager.

UNABLE TO ACCESS FILE

The command file you entered does not exist, or is in use, or does not contain the proper ACL.

ACTION: Check the command file name and re-enter the command file name.

UNRECOGNIZED COMMAND

You tried to enter a command that DG/XAP does not recognize. DG/XAP will not accept the command.

ACTION: Re-enter the command using a valid DG/XAP command.

APPENDIX B

GLOSSARY

This appendix defines the terms and concepts used in this manual.

ALM. Asynchronous Line Multiplexor. One type of hardware interface that the operating system uses to submit data to a communications link.

AOS. Data General's Advanced Operating System.

AOS/VS. Data General's Advanced Operating System with Virtual Storage.

ARGUMENT. A variable or variables entered in a command line to modify the value of the command.

ASYNCHRONOUS COMMUNICATION. A method of transmission that relies upon an exchange of signals to indicate when data is offered by one device and taken by another and to indicate the byte organization of the data stream.

AUTO-DIAL MODEM. A modem that allows automatic "dial up" with the remote system. DG/XAP contains a command that lets you automatically dial the modem at the remote site.

BAUD. The rate at which signals are transmitted over a given channel, usually measured in the number of signals per second.

BLOCK. A set of one or more records grouped as a unit. Communications stations apply an encoding procedure (CRC) over the data contained in records for error detection.

BYTE. A sequence of adjacent binary digits (usually eight in number) operated upon as a unit that can contain one character, such as the letter A.

CLI. The Command Line Interpreter, an interactive program that acts as the primary interface between the user and the operating system.

COMMAND. For DG/XAP, a request from a terminal that DG/XAP execute a particular program feature.

COMMAND FILE. A series of commands you enter in a file using a text editor such as SED or SPEED, or using the CLI CREATE command with the /I switch. You can execute the commands in the command file to run DG/XAP without operator intervention.

CONFIGURATION. A group of machines and devices that make up a data processing system.

CONTROL MODE. A mode of operating DG/XAP in which the local system issues commands to initiate all activity between the local system and the remote system.

CONTROL UNIT. A series of DG/XAP commands entered as a unit, then queued by DG/XAP for execution. Control units must begin with one version of the CONTROL command and end with the END CONTROL command.

DEDICATED LINE. An asynchronous line that links specific computers.

DIAL UP LINE. A line that uses the switched telephone network to transmit data between two sites via a modem located at each site. You "dial up" the remote site from the local site in the same way you make a telephone call.

DIRECT LINE. A line consisting of a cable directly connected to another computer without using modems or telephone lines.

DIRECTORY. A file that contains other files and directories (subdirectories). Each directory functions as a reference point for locating files.

FATAL ERROR. A condition that causes DG/XAP to cease execution and return control to the program in use before you executed DG/XAP (normally the CLI).

FILENAME. The alphanumeric string that identifies a file. The maximum length of the string varies with the operating system.

IAC. Intelligent Asynchronous Controller. One type of hardware interface that the operating system uses to submit data to a communications link.

INTERACTIVE PROCESSING. A method of processing commands by which DG/XAP processes a command immediately after the command is entered.

IPC. Interprocess Communication. You can enter DG/XAP commands in IPC mode using standard IPC command formats.

LOCAL. A system running in Control Mode is referred to as the Local System.

MODE. A state or method of program operation.

MODEM. A contraction of modulator/demodulator. A modem is a device that enables computers and terminals to communicate over telephone lines.

MULTIPLE TRANSFERS. A mode of operating DG/XAP by which the local system controls multiple asynchronous lines using user-defined command files.

OPERATING SYSTEM. The fundamental system program or programs that act as an interface between you and the computer hardware and regulate all processor, user, and peripheral activity.

PATHNAME. The route to your destination file. A pathname may consist of directories and filenames.

QUEUED PROCESSING. A method by which DG/XAP processes a series of commands entered in either a Control Unit or a command file.

RDOS. Data General's Real Time Disk Operating System.

REMOTE. A system running in Slave Mode is referred to as the remote system.

SLAVE LINE. For DG/XAP, an asynchronous line that transmits data between two sites and is controlled by the site running in Control Mode.

SLAVE MODE. A mode of operating DG/XAP in which the remote system receives commands from the local system (system in CONTROL MODE).

SWITCHED LINE. A telecommunications link created on demand for exclusive use by a process until the connection is released.

SWITCHES. The part of a command line that directly follows the command and that modifies or expands the value of the command.

TEMPLATE. A character that DG/XAP interprets symbolically rather than literally. A template can be used with a filename or pathname in certain commands. For example, you can enter the command LIST REMOTE AP+ to direct DG/XAP to list all files residing on the remote system that begin with the characters AP.

ULM. Universal Line Multiplexor. One type of hardware interface that the operating system uses to submit data to a communications link.

UNATTENDED OPERATION. For DG/XAP, a method of allowing communications stations to issue and accept commands from a command file rather than from a keyboard.



INDEX

A

@COMMANDFILE Command 6.4
AUDIT Command 6.6

B

Basic File Transfer
(see File Transfer)

C

CANCEL Command 6.7
Commands 4.2
 Command Files 4.6
 Entering Command in IPC Mode 4.7
 Interactive Commands 4.2
 Queued Commands 4.2
 Summary of DG/XAP Commands 4.7, 4.8
 Using Interactive and Queued Commands 4.4
Command Files 4.6
Communication Links 1.7
 Dedicated Lines 1.8
 Switched Lines 1.7
Concepts and Overview 1.1
Configurations 1.4
 Basic File Transfer 1.4
 Multiple File Transfers 1.6
 Unattended File Transfer 1.5
CONTROL Command 6.8
 CONTROL BAUD 6.9
 CONTROL LINE 6.10
 CONTROL/DIAL 6.11
 CONTROL/DIAL BAUD 6.12
Control Unit 4.2
Control Unit Execution 4.3
Correcting Keyboard Errors A.1

D

DIAL Command 6.15
Dictionary of Commands 6.1

D (cont.)

Dedicated Communications Lines 1.8
DELETE Command
 DELETE LOCAL 6.13
 DELETE REMOTE 6.14
DG/XAP Features 1.2

E

END CONTROL Command 6.16
Entering Commands in IPC (Interprocess Communication) Mode 4.7
Environment 1.3
 Hardware 1.3
 Software 1.3
ERASE Command 6.17
ERROR ABORT Command 6.18
Error Messages A.1
ERROR WARNING Command 6.19
Executing DG/XAP 5.2

F

File Transfer
 Basic File Transfer 1.4
 Confirmation of File Transfer 3.4, 5.4
 Multiple File Transfers 1.6
 Over a Dedicated Line 3.3, 5.3
 Over a Switched Line 3.3, 5.4
 Transferring Files over a Dedicated Line 5.3
 Transferring Files over a Switched Line 5.3
 Unattended File Transfer 1.5
 Using DG/XAP 1.4
 Without Operator Intervention 1.5

G

Generating DG/XAP
 (see Program Generation)
Glossary B.1

H

HALT LINE Command 6.20
Hardware Environment 1.3
HOLD Command 6.21

I

Interactive Commands 4.2
Interactive and Queued Commands 4.4, 4.5
IPC Mode 4.7

K

KEY Command 6.22

L

LIST Command
LIST LOCAL 6.23
LIST REMOTE 6.24
Loading DG/XAP 2.1
Local System 5.2
LOG Command 6.25

M

MOVE Command
MOVE LOCAL TO REMOTE 6.26
MOVE REMOTE TO LOCAL 6.28
Multiple File Transfer Using DG/XAP 1.6

N

NAME Command 6.30
NOLOG Command 6.31
NORESTART Command 6.32

O

Operating DG/XAP 5.1

P

Program Generation 3.1
 Preparing for Generation 3.2
 Generation Dialogue 3.2
Program Generation File 3.3
 Creating the Program Generation File 3.3
 Editing the Program Generation File 3.6

Q

QUEUE Command 6.33
Queued Commands 4.2

R

Remote System 5.2
RENAME Command
 RENAME LOCAL 6.35
 RENAME REMOTE 6.36

S

Sample Command File 4.6
Sample Control Unit 4.4
SCREEN OFF Command 6.37
SCREEN ON Command 6.38
SLAVE LINE Command 6.39
Software Environment 1.3
STATUS Command 6.40
STATUS LINE Command 6.42
Status and Error Messages A.1
STOP Command 6.43
Summary of DG/XAP Commands 4.7, 4.8
Switched Communications Lines 1.7

T

Terminating DG/XAP 5.4
Template Characters 6.3
Tracking System Operation 5.2
Transferring Files
 (see File Transfer)
TRIES Command 6.44

U

UNHOLD Command 6.45
USERNAME AND PASSWORD Command 6.46
Unattended File Transfer
 (see File Transfer)

W

WAIT UNTIL Command 6.47



Data General Users group

Installation Membership Form

Name _____ Position _____ Date _____

Company, Organization or School _____

Address _____ City _____ State _____ Zip _____

Telephone: Area Code _____ No. _____ Ext. _____

1. Account Category

- OEM
 End User
 System House
 Government

5. Mode of Operation

- Batch (Central)
 Batch (Via RJE)
 On-Line Interactive

2. Hardware

M/600
 MV/Series ECLIPSE®
 Commercial ECLIPSE
 Scientific ECLIPSE
 Array Processors
 CS Series
 NOVA®4 Family
 Other NOVAs
 microNOVA® Family
 MPT Family

| Qty. Installed | Qty. On Order |
|----------------|---------------|
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Other _____
 (Specify) _____

6. Communication

- HASP X.25
 HASP II SAM
 RJE80 CAM
 RCX 70 XODIAC™
 RSTCP DG/SNA
 4025 3270
 Other

Specify _____

3. Software

- AOS RDOS
 AOS/VS DOS
 AOS/RT32 RTOS
 MP/OS Other
 MP/AOS

Specify _____

7. Application Description

○ _____

4. Languages

- ALGOL BASIC
 DG/L Assembler
 COBOL FORTRAN 77
 Interactive FORTRAN 5
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9. Users Group

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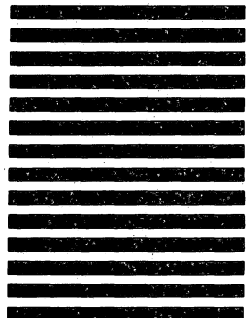
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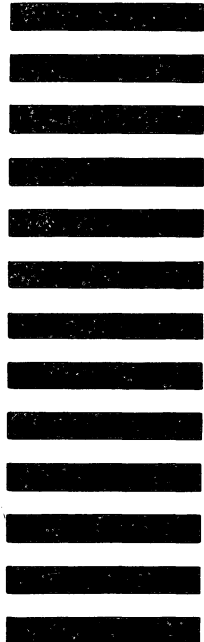
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