

# Generating, Running, and Using DG/GATE

# **GENERATING, RUNNING, AND USING DG/GATE<sup>TM</sup> SOFTWARE**

**Data General's  
General Asynchronous Terminal Emulator**

**093-000353-00**

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

Ordering No. 093-000353  
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Revision 00, October 1983  
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# PREFACE

This manual shows you how to load, configure, start, and operate Data General's DG/GATE™ software package.

For up-to-date information about the DG/GATE software product, please see the DG/GATE product release notice.

## HOW TO READ THIS MANUAL

All users should read chapter 1 for a general introduction to the DG/GATE product.

Systems managers should read chapters 2, 3 and 4.

Terminal operators should read chapters 4 and 5 for detailed instructions for running the DG/GATE program. Also refer to Appendix A for error messages and Appendix B for any unfamiliar terms you may encounter in this manual.

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# CHAPTER 1

## INTRODUCTION TO THE DG/GATE PRODUCT

DG/GATE (General Asynchronous Terminal Emulator) allows a user of an RDOS, AOS, or AOS/VS-based system to sign on at other remote systems as if at a terminal on that remote system.

Using low-cost asynchronous modems and phone lines (or a direct connection), a computer with DG/GATE software can share information with many other properly equipped systems.

DG/GATE makes it possible to use up-to-date information in centralized databases as well as the processing power and expensive peripherals on other computer systems.

Bi-directional file transfer is supported between most DGC operating systems.

## MAJOR FEATURES

- Communicates interactively with any other DGC system using low-cost asynchronous modems or the proper direct connection
- Allows access to public databases, such as Dow-Jones News Retrieval, THE SOURCE\*, or CompuServe
- Is a low-cost alternative to networking for sharing peripherals and processing power of other systems
- Operates from menus, with on-line HELP facility
- Supports selected low-cost auto-dial modems with on-line phone directories
- Supports file transfers between selected DGC operating systems
- Dials into any computer system supporting standard asynchronous ASCII terminals

## TERMINAL EMULATION

The DG/GATE emulator is software that allows a Data General computer system to imitate the characteristics of a non-intelligent ASCII terminal so that the user of the emulator can sign on at the remote system. The terminal from which the emulator is run then behaves as if it were a non-intelligent terminal on the remote host system.

If communications are to take place over phone lines, the system must be connected with an RS-232-C interface with modem control connected to any standard 300 or 1200 baud asynchronous modems.

If you need to look up information stored in the local system during an emulator session on a remote system, DG/GATE software makes it possible to suspend the emulator session, work on the local system, and then resume the emulator session without having lost the host connection.

\* THE SOURCE is a service mark of Source Telecomputing Corporation.

## **ACCESS TO PUBLIC DATA**

A DGC system running DG/GATE software is able to gain access to public databases such as Dow-Jones News Retrieval, CompuServe Network Services, or THE SOURCE, for information as diverse as corporate financial statistics, stock market brokerage account data, and airline schedule information.

In addition to letting you view information in public databases, the DG/GATE logging capability allow you to capture data from the database into a disk file on your own computer. You may print a hardcopy of this data whenever needed. You may also use the data as input to a program that could analyze the data or store the information for future reference.

Because the DG/GATE software emulates a standard asynchronous terminal, it can be used to access any non-Data General host which supports a teletypewriter.

## **EASE OF USE**

The DG/GATE emulator is operated from menus for ease of use.

The emulator software stores communication line characteristics in an on-line directory so that frequently used links to remote systems may be easily re-established.

DG/GATE software supports inexpensive auto-dial modems, such as the HAYES\* Smartmodem. A user can log on at a remote system even where that system is unattended. File transfers, where supported, can be initiated from the system using the DG/GATE emulator with no operator required at the remote system.

\* HAYES is a U.S. registered trademark of Hayes Microcomputer Products.



## HARDWARE AND SOFTWARE ENVIRONMENT

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

### Hardware

A generalized listing of the hardware required to run DG/GATE 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 transfer files to another DGC computer, each DGC site must be running the following software:

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

DG/GATE

# CHAPTER 2

## HOW TO LOAD DG/GATE

NOTE: For specific and up-to-date instructions for loading your DG/GATE software, refer to the product release notice supplied on the standard release tape.

If you are on an AOS or an AOS/VS system, DG/GATE will be the son of the CLI process you execute it from. If you are on an RDOS system, the DG/GATE program will simply become the program running the specific ground you are located in. If you intend on running the file transfer utility you need to be sure that the appropriate slave module is located on the remote machine.

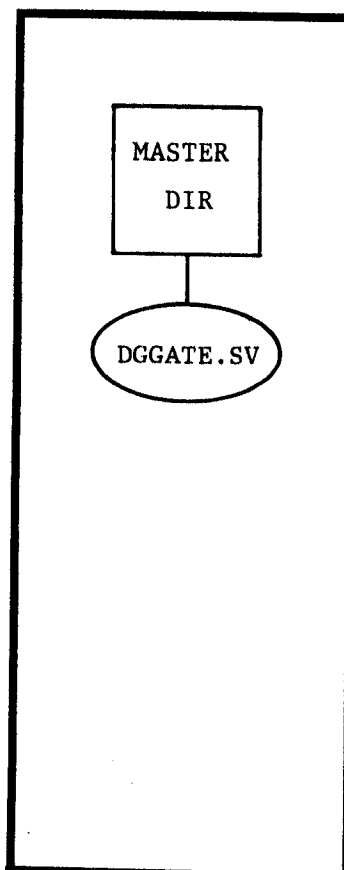
The name of the DG/GATE program is DGGATE.PR (for AOS and AOS/VS) and DGGATE.SV (for RDOS).

The slave module for file transfer is called GFTSLAVE.

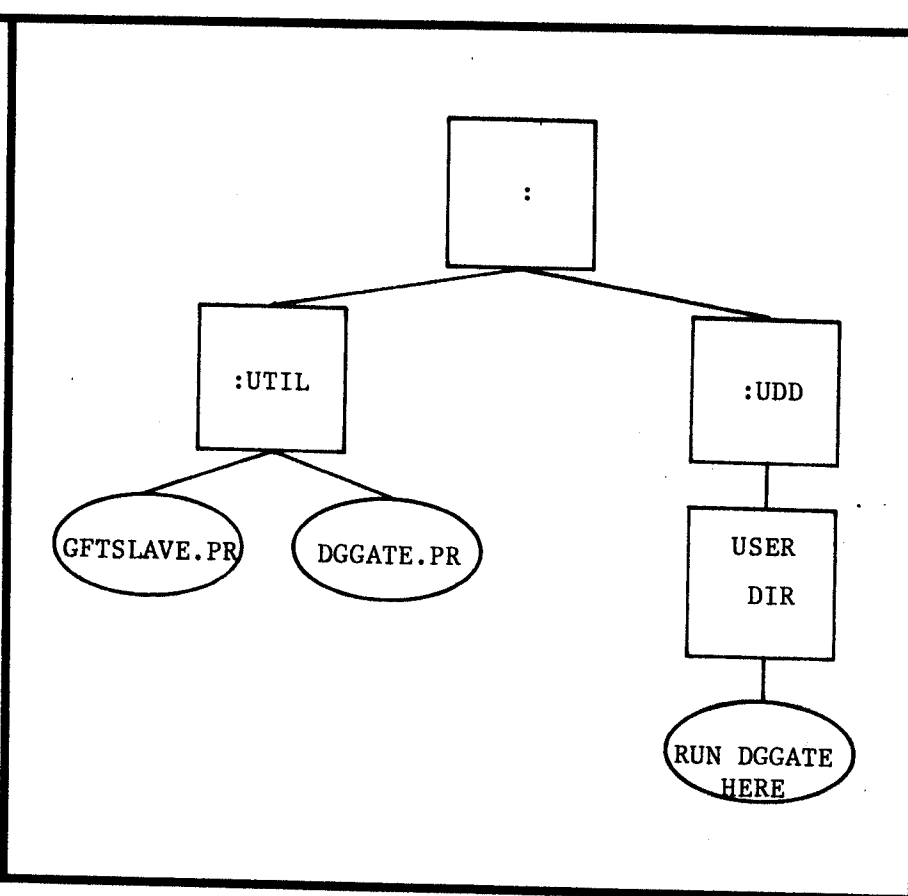
## SUGGESTED DIRECTORY STRUCTURES

The following are suggested directory structures for loading DG/GATE.

### RDOS



### AOS and AOS/VS



# CHAPTER 3

## HOW TO CONFIGURE DG/GATE

Before you run DG/GATE you must be sure that the characteristics of the multiplexor are set properly.

---

### FOR RDOS

---

If you have an RDOS system ALMSPD.SR must define the line characteristics as 8 data bits and no parity.

For example: LNDEF 00,11,1,8,NO,NOLOOPBACK,MODEM

This statement defines the multiplexor line 0 as 1200 baud, 1 STOP BIT, 8 DATA BITS, no parity, no LOOPBACK, use a modem.

Print the file ALMSPD.SR on your RDOS system for specific details on setting line characteristics.

The parity that you actually want to transmit will be provided by DG/GATE. See the RDOS reference manual for a discussion of ALMSPD modification and definitions.

---

### FOR AOS AND AOS/VS

---

If you have an AOS or AOS/VS system you can set the multiplexor line to 8 data bits and no parity at SYSGEN time or use the CHARACTERISTICS command from the Master Console (PID 2 OP).

Refer to AOS or AOS/VS CLI Manual for specific information concerning the CHARACTERISTICS command.

If your operating system is a preGENned AOS system, you must use the characteristics command to change the multiplexor line characteristics.

Refer to Release Notice for your AOS or AOS/VS operating system for most up-to-date information about the SYSGEN process.

The actual parity to be used is provided by DG/GATE.

# CHAPTER 4

## HOW TO START AND STOP DG/GATE

This chapter explains how to start and stop the DG/GATE program.

Before You Start DG/GATE -----> Use this Checklist

- the multiplexor line is GENned as 8 data bits/character and no parity
- the modem is ON, the correct cables are attached, DTR is high
- you are in the proper directory to run DG/GATE
- the proper ACLs are set on the DG/GATE program as well as slave modules (AOS, AOS/VS only)

### To START the DG/GATE program

Type DGGATE from the CLI on your local system. Your system displays the DG/GATE Main Menu. You are now ready to choose options.

### To STOP the DG/GATE program

When you choose option 8 -- TERMINATE DG/GATE -- the system returns to the CLI. You are now out of the DG/GATE program.

# CHAPTER 5

## HOW TO OPERATE DG/GATE

The operator instructions for each function in the DG/GATE program are organized as follows:

- A sample screen is provided for each function
- Program prompts (indicated in all capital letters) are located on the left side of operator instruction pages
- The text to the right of each program prompt indicates the responses you may make to that prompt
- Error messages are listed in all capital letters with appropriate responses following the messages

### How To Enter Information

To enter information on a screen, type the appropriate response, then press the NEW LINE (NL) key.

If you make an error entering information, use the DEL (DELETE) key to erase information. Then type the correct information.

### Function Keys

The DG/GATE program uses one special key, Function Key 15 (F15). This key is located on the row of function keys toward the top of your keyboard.

When you are in an active remote communication session, you may press F15 to return to the Main Menu.



## DG/GATE OPTIONS

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## MAIN MENU

The Main Menu lists all DG/GATE options.

DG/GATE MAIN MENU  
Revision 1.00

- 0. Help
- 1. Start or continue remote communications
- 2. End remote communications
- 3. Transfer a file
- 4. Use local CLI
- 5. Start or stop communications logging
- 6. Start or stop character translation
- 7. Maintain phone directory
- 8. End DG/GATE

ENTER CHOICE:

ENTER CHOICE

Type the number of the desired option.

Then follow the instructions for the option you chose.

## HELP

Option 0 displays HELP information to aid you in running DG/GATE.

DG/GATE HELP FILE  
Revision 1.00

DG/GATE is a General Asynchronous Terminal Emulator program that allows users of a Data General computer to dial up another computer over an asynchronous communications line and interact with that computer as if the user had a terminal on that system.

The main menu items are as follows:

- 0. HELP -- Displays this help information
- 1. START OR CONTINUE REMOTE COMMUNICATIONS -- Places your terminal in remote communications mode. You are prompted for communications line characteristics and phone number  
...

Press NL to return to Main Menu

When you choose option 0, the system displays HELP information.

The system displays the entire HELP file.

To read portions of the file, press CTRL-S to stop the text on the screen. Press CTRL-Q to continue scrolling through the HELP file.

When you are finished, press NL to return to the Main Menu.

## START OR CONTINUE REMOTE COMMUNICATIONS

Option 1 causes your terminal to begin communications with a remote computer. You can specify the remote computer by a number choice from a list of computers you have used before or you can specify a new remote computer.

START REMOTE COMMUNICATIONS Revision 1.00	
Selection #	Computer Name
1	Dow Jones (Telenet Atlanta)
2	Dow Jones (Telenet Boston)
3	Software Support Center OIS System
4	Timesharing service -- Atlanta

Enter selection number or press NL to specify another computer

ENTER SELECTION NUMBER OR  
PRESS NL TO SPECIFY  
ANOTHER COMPUTER

Type the number of the computer you  
want to communicate with.

Follow instructions for AFTER YOU HAVE  
SELECTED THE REMOTE COMPUTER.

If you want to specify another computer,  
press NL.

The system then displays the DEFINE REMOTE  
COMPUTER screen.

DEFINE REMOTE COMPUTER  
Revision 1.00

Multiplexor line number: [QTY:0] QTY:

Baud rate: [4]

Parity (0=None, 1=Odd, 2=Even, 3=Mark): [0]

Is line connected to a modem? [Y]

Is it an auto-dial modem? [Y]

Enter telephone number:

Use character translation tables when communicating? [N]

Save this information in the online directory? [Y]

Enter name to call the computer in the online directory:

MULTIPLEXOR LINE NUMBER  
Default = 0

Enter the physical line number that you  
will use to connect to the remote computer.

BAUD RATE  
Default = 4 (1200)

Enter the number corresponding to the baud  
rate of your modem.

1	=	110
2	=	300
3	=	600
4	=	1200
5	=	2400
6	=	4800

PARITY  
Default = 0 (none)

Enter parity for this line.

IS LINE CONNECTED TO A  
MODEM?

Choose one of the following:

. Type Y if line is connected to a modem.

+-----+  
| IS IT AN AUTO-DIAL MODEM? |  
+-----+

If you are NOT using an auto-dial modem, type N. You will speak directly to the modem. You may issue modem commands and dial manually.

If you are using an auto-dial modem, type Y.

+-----+  
| ENTER TELEPHONE NUMBER |  
+-----+

Then enter the telephone number of the remote system. The modem will automatically dial the remote system.

. Type N if line is NOT connected to a modem.

USE CHARACTER  
TRANSLATION  
TABLE WHEN  
COMMUNICATING?

Type Y to use character translation table.

Type N if you do not need to use translation table.

SAVE THIS INFORMATION  
IN THE ONLINE DIRECTORY?

If you do NOT need to save this information for future use, type N.

If you would like to save this remote computer definition for future use, type Y.

+-----+  
| ENTER NAME TO CALL THE COMPUTER |  
| IN THE ONLINE DIRECTORY: |  
+-----+

Then type the name of the computer or computer service for later reference.

Follow instructions for AFTER YOU HAVE  
SELECTED THE REMOTE COMPUTER.

---

AFTER YOU HAVE SELECTED THE REMOTE COMPUTER

---

- . If your modem has auto-dial, the modem will call the remote computer.
- . If your modem does not have auto-dial you will be speaking directly to the modem at this point. Issue modem commands to call the number you desire.

When DG/GATE makes connection, the system displays the modem message:

```
+-----+  
|          CONNECT          |  
+-----+
```

DG/GATE has made a physical connection to the remote computer. Log on to the computer.

To transfer files:

When you receive the CLI prompt, press F15 to return to the Main Menu of DG/GATE.

Then choose option 3.

To log off the remote computer:

Type BYE.

NOTE: If your modem fails to make a connection to the remote computer the system displays the message

```
+-----+  
|    NO CARRIER    |  
+-----+
```

You must choose option 2 from the Main Menu to End the Remote Session EVEN THOUGH NO CONNECTION WAS MADE.

## END REMOTE COMMUNICATIONS

Option 2 disconnects the connection with the remote computer.

<p>END REMOTE COMMUNICATIONS Revision 1.00</p> <p>Remote communications is active</p> <p>Do you want to terminate remote communications? Y</p> <p>Press NL to return to Main Menu</p>
---

DO YOU WANT TO TERMINATE  
REMOTE COMMUNICATIONS?

Type Y to terminate your remote  
communications session.

PRESS NL TO RETURN TO  
MAIN MENU

Press NL to return to Main Menu.



## TRANSFER A FILE

The File Transfer function allows you to send files to a remote computer or receive files from a remote computer.

Before you begin file transfer, you must make a connection to a remote machine. Be sure connection is successful before trying to transfer a file.

TRANSFER A FILE  
Revision 1.00

1. Send disk file as keyboard input
2. Use file transfer protocol to send or receive a file

Enter choice:

Press NL to return to Main Menu

ENTER CHOICE:

You can transfer a file 2 ways:

Type 1 to send a disk file directly.

Type 2 to use the file transfer protocol to send or receive a file.

CHOICE 1

TRANSFER A FILE  
Revision 1.00

Take input from which disk file?

Enter number of seconds to delay between records [0]:

Send another disk file?

TAKE INPUT FROM WHICH  
DISK FILE?

Type the name of the disk file you want to transfer.

ENTER NUMBER OF SECONDS  
TO DELAY BETWEEN RECORDS  
Default = 0

It may be necessary to delay transmission of records because the remote machine may not be able to accept characters as quickly as they are being sent.

Type the number of seconds to delay between records.

You may specify a part of a second such as:

.05 .10 etc.

SEND ANOTHER DISK FILE?

Type Y to send another disk file. The cursor returns to the first prompt on the screen. Enter the disk file name.

or

Type N if you are finished sending files. The program displays the TRANSFER A FILE screen.

Choose another option or press NL to return to the Main Menu.

---

CHOICE 2

---

TRANSFER A FILE  
Revision 1.00

Do you wish to (S)end files, (R)ecieve files, or (T)erminate file transfer? S

Enter the name of the file to send: FILE1

=FILE1

1(512) 2(190)

Enter the name of the file to send:

Do you wish to (S)end files, (R)ecieve files, or (T)ermiate file transfer? R

Enter the name of the file to receive: FILE2

=FILE2

1(512) 2(300)

Enter the name of the file to receive:

Do you wish to (S)end files, (R)ecieve files, or (T)erminate file transfer? T

File transfer function terminating.

DO YOU WISH TO (S)END  
FILES, (R)ECEIVE FILES,  
OR (T)ERMINATE FILE  
TRANSFER?

Choose one of the following:

- . Type S to send a file to the remote computer.
- . Type R to receive a file from the remote computer.
- . Type T to terminate file transfer.

---

TO SEND A FILE

---

ENTER THE NAME OF THE  
FILE TO SEND

Type the name of a file you want to send  
to the remote computer.

```
+-----+
|      <filename>      |
|      1(999) 2(999)   |
+-----+
```

The program confirms that the file is  
being sent by displaying the filename  
and the size of each block in the file.

ENTER THE NAME OF THE  
FILE TO SEND

Continue typing filenames to send to the  
remote computer.

When you are finished sending files, press  
NL.

Then either type an R to receive a file  
or a T to terminate file transfer.

---

TO RECEIVE A FILE

---

ENTER THE NAME OF THE  
FILE TO RECEIVE

Type the name of a file you want to receive  
from the remote computer.

```
+-----+
|      <filename>      |
|      1(999) 2(999)   |
+-----+
```

The program confirms that the file is being  
sent by displaying the filename and the size  
of each block in the file.

ENTER THE NAME OF THE  
FILE TO RECEIVE

Continue typing filenames that you want to  
receive from the remote system.

When you have finished receiving files,  
press NL.

DO YOU WISH TO (S)END  
FILES, (R)ECEIVE FILES,  
OR (T)ERMINATE FILE  
TRANSFER

Type S to send a file or type T to  
terminate file transfer.

---

TO TERMINATE FILE TRANSFER

---

The program displays:

```
+-----+  
|  FILE TRANSFER FUNCTION TERMINATING  |  
+-----+
```

The program displays the TRANSFER A FILE  
screen.

Choose another option or press NL to return  
to the Main Menu.

## USE LOCAL CLI

Option 4 allows you to use the local CLI (Command Line Interpreter) while running the DG/GATE program. When you are through using the CLI, you can continue using DG/GATE.

### FOR RDOS

```
+-----+
|               |
|   USE LOCAL CLI   |
|   Revision 1.00   |
|               |
| R               |
| .               |
| .               |
| .               |
| BYE              |
|               |
+-----+
```

### FOR AOS and AOS/VS

```
+-----+
|               |
|   USE LOCAL CLI   |
|   Revision 1.00   |
|               |
| )               |
| .               |
| .               |
| .               |
| BYE              |
|               |
+-----+
```

The system displays the CLI prompt for your system.

Perform any CLI functions.

Then type BYE to return to the DG/GATE Main Menu.

## START OR STOP COMMUNICATIONS LOGGING

Option 5 allows you to log data received over the communications line. The data may be logged to a disk file or sent directly to a printer.

COMMUNICATIONS LOGGING  
Revision 1.00

Communications logging is inactive.

Do you want to start communications logging?

Enter file name to log to:

Press NL to return to Main Menu

### TO START COMMUNICATIONS LOGGING

COMMUNICATIONS LOGGING  
IS INACTIVE

To start communications logging, type Y.

DO YOU WANT TO START  
COMMUNICATIONS LOGGING?

ENTER FILE NAME TO LOG TO

Type the name of the file you want to  
log information to.

If you specify a printer as the file  
name, information received from the  
remote computer will be printed directly.

PRESS NL TO RETURN  
TO MAIN MENU

Press NL. The system returns to the  
Main Menu.

---

TO STOP COMMUNICATIONS LOGGING

---

COMMUNICATIONS LOGGING  
Revision 1.00

Communications logging is active.

Do you want to stop communications logging? Y

Press NL to return to Main Menu

COMMUNICATIONS LOGGING  
IS ACTIVE

Type Y to stop communications logging.

DO YOU WANT TO STOP  
COMMUNICATIONS LOGGING?

PRESS NL TO RETURN  
TO MAIN MENU

Press NL. The system returns to the  
Main Menu.

---

TO VIEW THE LOGFILE

---

If you are on an AOS, AOS/VS, or RDOS system and you logged to a disk file then you may view the log file on your console by typing the following RDOS CLI command :

```
+-----+  
| TYPE <logfile name> |  
+-----+
```

where <logfile name> is the file name you chose to log to.

---

### TO PRINT THE LOGFILE

---

You may get a hardcopy print of the log file on your system printer if you issue the following RDOS CLI command :

```
+-----+  
| PRINT <logfile name> |  
+-----+
```

where <logfile name> is the file name you chose to log to.

An alternative to getting a hardcopy print of the log file is to log directly to the system printer. This is done by choosing \$LPT as the file to log to.

You may get a hardcopy print of the log file on your system printer if you issue the following AOS or AOS/VS CLI command :

```
+-----+  
| QPRINT <logfile name> |  
+-----+
```

where logfile name is as defined above.



## START OR STOP CHARACTER TRANSLATION

Option 6 allows translation and masking of certain characters when communicating with non-Data General computers.

<p>CHARACTER TRANSLATION Revision 1.00</p> <p>Character translation is inactive</p> <p>Do you want to start character translation?</p> <p>Press NL to return to Main Menu</p>
---

### TO START CHARACTER TRANSLATION

CHARACTER TRANSLATION  
IS INACTIVE

Type Y to start character translation.

DO YOU WANT TO START  
CHARACTER TRANSLATION?

PRESS NL TO RETURN TO  
MAIN MENU

Press NL. The system returns to the  
Main Menu.

<p>CHARACTER TRANSLATION Revision 1.00</p> <p>Character translation is active</p> <p>Do you want to stop character translation? Y</p> <p>Press NL to return to the Main Menu</p>
--

---

TO END CHARACTER TRANSLATION

---

CHARACTER TRANSLATION  
IS ACTIVE

Type Y to end character translation.

DO YOU WANT TO STOP  
CHARACTER TRANSLATION?

PRESS NL TO RETURN TO  
THE MAIN MENU

Press NL. The system returns to the  
Main Menu.

## MAINTAIN PHONE DIRECTORY

Option 7 allows you to maintain a list of phone numbers for remote computers. You may keep a list of "most used" phone numbers for remote communications to be used in Option 1 - Starting or Continuing Remote Communications.

MAINTAIN PHONE DIRECTORY	
Revision 1.00	
Selection #	Computer Name
01	Dow Jones (telenet 1200 baud Atlanta)
02	Dow Jones (Tymnet 1200 baud Boston)
03	Software Support Center OIS System
04	Timesharing Service (Atlanta)

Functions: A=Add      D=Delete      C=Change      L=List

Enter function choice : A

Enter selection number: 01

### FUNCTIONS

Choose one of the following:

- . Type A to add a phone number.
- . Type D to delete a phone number.
- . Type C to change a phone number.
- . Type L to list all phone numbers on file.

-----  
FOR ADD  
-----

ENTER SELECTION NUMBER

Type the selection number of the line you want to add.

The system then displays the DEFINE REMOTE COMPUTER screen.

-----  
DEFINE REMOTE COMPUTER  
Revision 1.00  
-----

Multiplexor line number: [QTY:0] QTY:

Baud rate: [4]

Parity (0=None, 1=Odd, 2=Even, 3=Mark): [0]

Is line connected to a modem? [Y]

Is it an auto-dial modem? [Y]

Enter telephone number:

Use character translation tables when communicating? [N]

Save this information in the online directory? [Y]

Enter name to call the computer in the online directory:

MULTIPLEXOR LINE NUMBER  
Default = 0

Enter the physical line number that you will use to connect to the remote computer.

BAUD RATE  
Default = 4 (1200)

Enter the number corresponding to the baud rate of your modem. Rates may be:

1 = 110  
2 = 300  
3 = 600  
4 = 1200  
5 = 2400  
6 = 4800

PARITY  
Default = 0 (none)

Enter parity for this line.

IS LINE CONNECTED TO A  
MODEM?

Choose one of the following:

. Type Y if line is connected to a modem.

```
+-----+
| IS IT AN AUTO-DIAL MODEM? |
+-----+
```

If you are NOT using an auto-dial  
modem, type N. You will speak directly to  
the modem. You may issue modem commands  
and dial manually.

If you are using an auto-dial modem,  
type Y.

```
+-----+
| ENTER TELEPHONE NUMBER |
+-----+
```

Then enter the telephone number  
of the remote system. The modem will  
automatically dial the remote system.

. Type N if line is NOT connected to a  
modem.

USE CHARACTER  
TRANSLATION  
TABLE WHEN  
COMMUNICATING?

Type Y to use character translation table.

Type N if you do not need to use translation  
table.

SAVE THIS INFORMATION  
IN THE ONLINE DIRECTORY?

To save this computer definition for future  
use, type Y.

```
+-----+
| ENTER NAME TO CALL THE COMPUTER |
| IN THE ONLINE DIRECTORY: |
+-----+
```

Then type the name of the computer or  
computer service for later reference.

The system then displays the MAINTAIN PHONE DIRECTORY screen and lists the selection you just added. Type another function choice or press NL to return to Main Menu.

---

TO DELETE

---

ENTER SELECTION NUMBER

Type the number of the line you want to delete. The program deletes that computer from the phone directory and displays the word AVAILABLE next to that selection number. You may re-assign that selection number to another computer when desired.

Type another function choice or press NL to return to the Main Menu.

---

TO CHANGE

---

ENTER SELECTION NUMBER

Type the number of the line you want to change.

The program displays the DEFINE COMPUTER screen.

Change information by typing over the information on the screen. Press NL to skip over correct information.

After the last field of information, the system displays the MAINTAIN PHONE DIRECTORY screen and lists the changes you just made. Type another function choice or press NL to return to the Main Menu.

---

TO LIST

---

ENTER SELECTION NUMBER

Type the selection number of the line you want to list. The program displays the DEFINE A COMPUTER screen and lists information on file for that selection number.

Type another function choice or press NL to return to the Main Menu.

## EXIT FROM DG/GATE

Option 8 terminates the DG/GATE program and returns you to the CLI.

```
+-----+
|                               |
|          EXIT FROM DG/GATE   |
|        Revision 1.00         |
|                               |
| Do you want to exit from the DG/GATE program? Y |
|                               |
+-----+
```

DO YOU WANT TO EXIT FROM  
THE DG/GATE PROGRAM?

Type Y to exit this program. The system  
returns you to the CLI prompt.

Type N if you wish to continue using  
DG/GATE. The system returns you to the  
Main Menu. Choose another option.

```
+-----+
|                               |
|          EXIT FROM DG/GATE   |
|        Revision 1.00         |
|                               |
| Do you want to exit from the DG/GATE program? Y |
|                               |
| You have an active session. Do you want to terminate DG/GATE? |
|                               |
+-----+
```

If you have an active communications  
session in progress the system will display  
the additional prompts.

Type Y to terminate DG/GATE.

or

Type N to keep the session active.

The system then returns to the Main Menu.

# APPENDIX A

## OPERATOR AND ERROR MESSAGES

INVALID RESPONSE - ENTER Y OR N ONLY

You may only answer this question with a Y or N.

ACTION: Type Y or N

YOU CANNOT USE FILE TRANSFER UNLESS YOU HAVE AN ACTIVE SESSION

You have tried to use option 3 before you have made a connection to the remote computer.

ACTION: Run option 1 and make sure that you see the CONNECT message before you try to transfer files.

YOU HAVE NO ACTIVE SESSION TO TERMINATE :

You have tried to terminate communications with a remote machine before you started remote communications.

ACTION: Choose another DG/GATE option.



**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.

**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.

**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.

**DEDICATED LINE.** An asynchronous line that links specific computers.

**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.

**DISK LOGGING.** A DG/GATE function that writes all characters received from the remote computer to a disk file.

**FILE TRANSFER.** A DG/GATE function that allows you to send files to a remote system or receive files from a remote system.

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

**LINE CHARACTERISTICS.** Communication line characteristics which include stop bits, parity, baud rate, and modem type.

**LOCAL SYSTEM.** The system from which you are running DG/GATE.

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

**MULTIPLEXOR.** A hardware device that allows handling of multiple signals over a single channel.

**PRINTER LOGGING.** A DG/GATE function that writes all characters received from the remote system to a disk file, then prints the contents of the file.

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

**REMOTE SYSTEM.** The system to which you establish a remote connection.

**SLAVE.** The portion of code which resides in the remote system and communicates with the File Transfer code in your local system.

**SLAVE MODE.** A mode of operating DG/GATE in which the remote system receives commands from the local system.

**TRANSLATION TABLE.** A table containing the octal values assigned to characters.

# APPENDIX C

## TRANSLATION TABLE

```
;
;
; TRANSLATION TABLE. EACH WORD IN THIS TABLE REPRESENTS
; A BYTE OF INPUT. THAT IS, THE BYTE READ FROM THE MODEM IS
; USED AS AN INDEX INTO THIS TABLE. THE WORD IS THEN USED TO
; REPLACE THE BYTE IN THE OUTPUT BUFFER. IF THE RIGHT BYTE IS
; ZERO THEN ONLY THE LEFT BYTE IS WRITTEN. IF THE RIGHT BYTE IS
; NON-ZERO, THEN BOTH BYTES ARE WRITTEN ALLOWING A 2 TO 1 TRANS-
; LATION FOR EACH BYTE. IF BOTH BYTES ARE ZERO, THEN NOTHING IS
; OUTPUT TO THE CONSOLE.
;
;
; .TXTN      1      ;NO NULL WORD AFTER TEXT STRINGS
DFTBL: 0      ;0
;1
;2
;3
;4
;5
;6
7*400      ;7 - BELL
31*400      ;10 - CURSOR LEFT FOR BACK SPACE
11*400      ;11 - TAB
12*400      ;12 - NL
0      ;13
14*400      ;14 - FF CLEAR THE SCREEN
15*400      ;15 - CR
0      ;16
0      ;17
0      ;20
0      ;21
0      ;22
0      ;23
0      ;24
0      ;25
0      ;26
0      ;27
0      ;30
0      ;31
0      ;32
0      ;33
14*400      ;34
0      ;35
0      ;36
0      ;37
.EJEC
```

40*400	;40 - SPACE
41*400	;41 - !
42*400	;42 - "
43*400	;43 - #
44*400	;44 - \$
45*400	;45 - %
46*400	;46 - &
47*400	;47 - ' ,
50*400	;50 - (
51*400	;51 - )
52*400	;52 - *
53*400	;53 - +
54*400	;54 - ,
55*400	;55 - -
56*400	;56 - .
57*400	;57 - /
60*400	;60 - 0
61*400	;61 - 1
62*400	;62 - 2
63*400	;63 - 3
64*400	;64 - 4
65*400	;65 - 5
66*400	;66 - 6
67*400	;67 - 7
70*400	;70 - 8
71*400	;71 - 9
72*400	;72 - :
73*400	;73 - ;
74*400	;74 - <
75*400	;75 - =
76*400	;76 - >
77*400	;77 - ?
.EJEC	
100*400	;100 - @
101*400	;101 - A
102*400	;102 - B
103*400	;103 - C
104*400	;104 - D
105*400	;105 - E
106*400	;106 - F
107*400	;107 - G
110*400	;110 - H
111*400	;111 - I
112*400	;112 - J
113*400	;113 - K
114*400	;114 - L
115*400	;115 - M
116*400	;116 - N
117*400	;117 - O
120*400	;120 - P
121*400	;121 - Q
122*400	;122 - R
123*400	;123 - S
124*400	;124 - T

125*400	;125 - U
126*400	;126 - V
127*400	;127 - W
130*400	;130 - X
131*400	;131 - Y
132*400	;132 - Z
133*400	;133 - [
134*400	;134 - \
135*400	;135 - ]
136*400	;136 - ^
137*400	;137 - _
.EJEC	
140*400	;140 -
141*400	;141 - A
142*400	;142 - B
143*400	;143 - C
144*400	;144 - D
145*400	;145 - E
146*400	;146 - F
147*400	;147 - G
150*400	;150 - H
151*400	;151 - I
152*400	;152 - J
153*400	;153 - K
154*400	;154 - L
155*400	;155 - M
156*400	;156 - N
157*400	;157 - O
160*400	;160 - P
161*400	;161 - Q
162*400	;162 - R
163*400	;163 - S
164*400	;164 - T
165*400	;165 - U
166*400	;166 - V
167*400	;167 - W
170*400	;170 - X
171*400	;171 - Y
172*400	;172 - Z
173*400	;173 -
174*400	;174 -
175*400	;175 -
176*400	;176 -
0	;177 - NULL

```

;
      .BLK      127.      ;NO OUTPUT FOR EIGHT BIT VALUES
;
TABLE: .BLK      256.      ;USER TRASLATE TABLE
;

.EJEC

```