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# **GAPPL Application Distribution Facility User's Manual: Version 2.0 for the Corps of Engineers Automation Plan**

by  
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The Get APPLication (GAPPL) Application Distribution Facility is a system to distribute personal computer applications electronically. New applications or updates to current applications are uploaded by the Office of the Chief of Engineers to the Corps of Engineers Automation Plan mainframe. District and division users then download these applications with GAPPL. This manual provides instructions on setting up the parameters and downloading an update or complete application via GAPPL.

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## FOREWORD

The research was conducted for the Directorate of Civil Works, Headquarters, U.S. Army Corps of Engineers (HQUSACE), under the Civil Works Work Unit 32719, "Application Distribution Facility (GAPPL)." The HQUSACE technical monitors are Mr. John Perez and Mr. Dave Harmon, CECW-OM-B.

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## Introduction

The Get APPLICATION (GAPPL) Application Distribution Facility is a system to distribute personal computer (PC) applications electronically. New applications or updates to current applications are uploaded by the Office of the Chief of Engineers (OCE) to the Corps of Engineers Automation Plan (CEAP) mainframe. District and division users then download these applications with GAPPL. This manual provides instructions on setting up the parameters and downloading an update or complete application via GAPPL.

## Mode of Technology Transfer

OCE district personnel received training and documentation on implementing GAPPL, and are currently using it in the field. OCE headquarters administrates the update and release of applications to district and division personnel.

Candidates for a GAPPL system are a group of people who are dependent on another group or person for information in order to complete their assigned mission. A GAPPL system requires a designated administrator. All clients must have a PC with DOS version 3.0 or higher and a copy of the GAPPL executable. They must also have read only access to the application files stored on the mainframe.

## Mainframe Access

When the user accesses GAPPL from the DOS command line, or selects "Program Updates from Mainframe" from within the Automated Budget System (ABS), the following screen is displayed:

The screenshot shows a main menu for the GAPPL Application Distribution Facility. At the top, a large box contains the title and developer information. Below it, a smaller box lists the menu options: Communication Setup, Get Application, and Quit. At the bottom, there is a Message Box area.

```

      GAPPL
      Application Distribution Facility
      Developed by: U.S. Army Corps of Engineers
      (C.E.R.L.)

      Communication Setup
      Get Application
      Quit

      Message Box

```

The first time you run GAPPL you must select the Communications Setup option. This step is required, since communication parameters need to be set and saved. Once you have established connectivity with the mainframe, these parameters need not be reset since they are saved on the PC.

## Setup Procedure

```
name: John Doe
route: cdcnet
mode: modem
modem_type: Multimodem_V32
port: 1
local_access: 2400
mainframe_access: 2400
parity: odd
speed/accuracy: quickest/reliable
dial/pulse_phone: D
telephone_number: 9,18006264415
mainframe_login: xxxxxxxx
mainframe_password: xxxxxx
family: abs
costcode_selection: 1
```

Press <F10> to save and quit, <Esc> to just quit

If you select **Communication Setup**, you will be shown a list of parameters that require values. Some of the parameters have pop-up lists attached which give you a choice of values. These parameters are: route, mode, modem\_type, port, local\_access, mainframe\_access, parity, speed/accuracy, and dial/pulse\_phone.

The choices for the parameters are listed below:

route	cdcnet,manual
mode	network,modem
modem_type	Hayes_or_compatible, Multimodem_V32, other
port	1,2,3
local_access	1200,2400,4800,9600,19200
mainframe_access	1200,2400,4800,9600
parity	mark, even, odd, none
speed/accuracy	quickest/reliable, quick/more reliable, slow/most reliable
dial/pulse_phone	D, P

## Setup Procedure (cont.)

The name is required to identify the user. The telephone number is for cdcnet access. The mainframe\_login, mainframe\_password, and family are parameters required to access CEAP. The family will always be ABS unless told otherwise. The costcode\_selection parameter is the number corresponding to the cost code in the choice list during login. It is NOT the actual cost code number. The cost code information must be entered during the initial login to CEAP. (See Setting up Cost Codes on CEAP via GAPPL, p 10). To understand more about these parameters, read the notes found on p 9.

When you finish editing the parameter values, press [F10] to save the changes on the PC. Once the parameters have been saved, they will remain the same for later use.

## Downloading

After Communication Setup, you can select **Get Application** to log on and download an application. The logon process takes approximately 2 minutes. Messages appear at the bottom in the message box, indicating the status of the logon.

If you are using a modem, and all of the communication parameters are correct, the next screen the user will see is the list of applications available to download.

If you are going through a network, a message like the following will appear at the bottom of the screen:

Access the mainframe through your network or  
dataswitch. When you see CONNECT hit the  
Escape <ESC> key.

This message will stay on the screen until you hit a key, after which you will be connected with the network, and the screen will be blue. At this point, you should follow the usual steps for connecting to the mainframe. When the prompt appears from the instructions, press the escape (Esc) key. (Note: This escape prompt may change during the year. Read the message on when to hit the escape key) The next screen to appear is the list of applications.

A list of available applications to download will appear as below:

Application	Version	Available
<b>Disitric Automated Budget System</b>	<b>6.01</b>	<b>4/1/92</b>
GAPPL Application Distribution System	2.0	4/1/92

Point of Contact:  
Dave Harmon

Phone Number:  
202-272-0282

## Downloading (cont.)

The message window containing the point of contact and phone number is displayed for the application highlighted. To select an application, you scroll through the list with the arrow keys and hit return on the application you wish to download. Once an application is selected, one of two scenarios may occur.

### Scenario 1

If you have either never downloaded the chosen application or downloaded the application successfully during a previous session, the processing box will appear. The processing screen lets you know what GAPPL is doing. It is not a list for you to choose from. GAPPL may appear to be frozen, but while this processing box is on the screen, GAPPL is downloading user information from the main-frame.

#### Process in Progress

<b>Verifying PC's Current Version</b> Verifying Disk Space Downloading Application Updating Current Version
--

One of the following two message boxes will appear shortly. If you have not downloaded the selected application previously using GAPPL, the message box appears as below:

1)

The Initial Version is 6.00 Do You Have This Version?: (Y or N)
--

Typing 'Y' tells GAPPL that you already have the system and you wish to get the updates to it. Typing 'N' will signal GAPPL to download the entire application. We recommend the user not download an entire application unless it is absolutely necessary, since it can take a considerable amount of time to download a very large application.

If you have downloaded the application through GAPPL before, the message box will display the current version and ask you if you want the update.

2)

Your PC Has Version 6.01 The Lates Version Available Is 6.03 Do you wish to get the lates Update or the Complete system?: (U or C)
---

## Downloading (cont.)

Typing 'U' tells GAPPL to update the selected application. Typing 'C' will instruct GAPPL to download the entire application. Again, keep in mind that downloading an entire system can take many hours.

After you respond to either message, another message box appears giving additional information.

Approximate download time in minutes: 9

Do You Wish To Proceed? (Y or N)

If 'N' is typed, GAPPL logs off the mainframe and returns to the main menu. If 'Y' is typed, GAPPL proceeds to download the selected application.

## Scenario 2

Scenario 2 will occur if you tried downloading the chosen application before this session and the transfer failed. If there have been no new releases of the application since the last transfer was attempted, the following message will appear:

This application was not successfully downloaded during previous sessions.

Do You Wish To Continue Transfer From Point of Failure? (Y or N)

Typing 'Y' tells GAPPL to get only the files that were not successfully transferred during the last attempt to get the application. This means all files included in an update or complete system need not be transferred during one session. The total update or complete system could be transferred in multiple sessions. Transfer time estimates are not given in this case.

Typing 'N' tells GAPPL not to continue the download from the point of failure. If the user chooses 'N', scenario 1 will be initiated and the process box will appear. As noted with scenario 1, you will be given the choice of getting an update to the chosen application or the complete application.

## Scenarios 1 and 2

Both scenarios provide a transfer screen to allow the user to see what files are being downloaded. As each file is downloaded, the percentage completed is shown in this screen.

## Downloading (cont.)

If the download is successful, GAPPL will ask you if the application should be installed now.

Do You Wish To Install Now? (Y or N)

If 'Y' is entered, GAPPL issues a message indicating how the application could be installed manually, and logs off the mainframe. Logging off may take a few seconds. GAPPL then goes to the directory where the application was placed and runs install.

File Transfer Successful.  
To install manually go to D:\GAPPL\sample  
and type Install.

You must be aware of the messages issued by the install routine. If the install routine does not execute properly, the application will not be updated. You will be required to run install manually, giving the necessary parameters to the install procedure. When you elect to have GAPPL install the application, you always should watch the screen during the installation procedure for any error messages.

For example, if the install procedure for SAMPLE required a drive parameter and you elected to install now, the application might not be installed successfully from within GAPPL. GAPPL executes install without giving it a drive parameter. You would then have to enter at the DOS prompt: <install c:> .

Entering 'N' for installing now will tell GAPPL not to run the install procedure. GAPPL again issues a message indicating how to install the application manually, and logs off the mainframe.

## Notes

### Modem Types

The type of modem you have affects the reliability of the connection. Modems often have their own set of commands with which to set modem soft switches. The Hayes brand of modems has a well known set of commands, and many other brands incorporate these commands as their own, so they are Hayes compatible. GAPPL expects a modem to perform in a standard way. It uses modem commands to control modem return codes, dialing type (tone or pulse), and other settings depending on the brand of modem. When using a modem, make sure the correct modem type is specified in the communication setup.

### Baud Rate

The rate at which a modem can transfer data is called the baud rate. A 2400 baud rate means the modem can transfer 2400 bits per second. If data is to be transferred between two computers, the modems connected to each computer must be set to the same baud rate. Just as two people talking on the telephone will not be able to understand one another if they are not talking the same language, two computers will not be able to understand one another if they are not transferring data at the same baud rate. Therefore, a modem attached directly to a PC must be set to the same baud rate as the answering modem on the mainframe. In GAPPL, this means the local access must be the same as the mainframe access. If you are navigating through a local-area network to a bank of modems, the local access takes on a slightly different meaning. The local access means the rate at which the user accesses the local-area network. In this case, the PC and the network are the two communicating parties, so the local access is the baud rate at which they communicate. The mainframe access is the baud rate for the calling modem on the network and the answering modem on the mainframe.

### Parity

Computer data is usually stored in chunks of eight bits. Some computers transmit all eight bits during communications sessions, whereas others transmit only seven bits and leave the eighth bit as an error check. This error check bit is known as parity. Like the baud rate, the parity must also be the same between two communicating computers. A communication package, such as Procomm or Kermit, can set this variable. GAPPL also controls the parity. Signs that the parity setting is not correct include file transfer failures and an inability to log in. These symptoms may not show up until after the user has transferred files successfully from a mainframe several times. Check the parity setting if these problems occur.

### Speed/Accuracy

Speed and accuracy are sometimes mutually exclusive in data communications. The speed is related not only to the baud rate, but also to the size of the packets of information being transmitted by the sending computer. The bigger the packet, the quicker the data transfer time. A packet of information must be sent again if it is lost or corrupted during transmission. This occurs when the transmission line has a lot of static. Quicker data transmission speeds may increase the number of retries, thereby decreasing the reliability. A slower data transmission rate (smaller size of packet) may decrease the likelihood of corrupted data. To obtain the highest data transmission reliability, baud rate should be set at its lowest value (1200 baud) and speed/accuracy should be set to slow/reliable. If the transmission lines are clean of noise that interferes with the data, the data transmission rate can be higher (larger packet sizes). In GAPPL, this means setting the baud rate to the highest value possible on your modem or network, and selecting the speed/accuracy to be quickest/reliable. In any case the user should try the quickest transmission rate options. If failure occurs, select lower settings for baud rate, speed/accuracy, or both.

## Setting Up Cost Codes on CEAP via GAPPL

The first time you access CEAP with your logon ID, you will have to set up a cost code. Later you may want to add to the list of cost codes you can charge to on CEAP. This is done using GAPPL and the following procedure:

1) Access CDCNET through the modem or network. In GAPPL set the communications mode to network (even when using a modem) and the route to manual. By setting route and mode to these two values, GAPPL gives the user full control over the login process. Port and baud must be set for the appropriate network or modem. Parity on CDCNET is always odd.

When you get the prompt "you may enter CDCNET commands" enter: crec abs. The user, password, and family prompts will appear. Answer with your logon ID and password and the following family.

```
USER: <logon id>
PASSWORD: <logon password>
Family: abs
```

2) If more than one cost code has been entered previously for that logon ID or the logon ID has never been used, a menu will appear with the various cost codes that can be selected. You may enter the number of the selected cost code (1,2,3, etc) or choose to add another. To add a cost code, select <Add new workcode> from the menu. If there is only one valid cost code the menu is skipped, and the session is charged to that cost code automatically. To access the menu to add an additional cost code, you type RUN\_UPDWC at the backslash prompt. The following questions will be asked when adding a new workcode or logging on for the first time:

```
Please enter the F&A Workcode to be used by this USERID (15 characters ( numbers
& UPPER CASE LETTERS); required)
?
```

Answer with a cost code at the question mark.

3) Please enter the F&A Organization Code for this Workcode (2 characters; UPPER CASE LETTERS; required)  
?

Answer with the corresponding organization code.

4) Please enter the Office of Primary Responsibility (maximum 3 characters; alpha must be UPPER CASE; Optional)  
?

Since this is optional, just hit return here.

5) Please enter a description for the F&A workcode (Up to 36 characters; optional)  
?

This is again optional and you can enter a short description or hit return to continue.

## Setting Up Cost Codes on CEAP via GAPPL (cont.)

6)

Please verify the following information

1) <costcode number>

2) <organization code>

3) <office of responsibility>

4) <workcode description>

Is this information correct (Yes/Y/No/N)

?

Enter Y if correct, otherwise it will ask the four questions again.

7)

Please enter amount budgeted for this workcode. Amount can be up to 8 digits

?

Enter the appropriate amount. If you go over this amount, CEAP will notify you when you log out, but it will not stop you from logging in again.

8)

Is this the correct amount (Y/N)

?

Enter Y.

At this point CEAP will give some system notes and finally the / prompt. Now hit the escape key to continue the application selection and transfer within GAPPL. Once the cost code is set up, the cost\_code selection parameter in the communications setup screen can be set to the corresponding number. If this was the first cost code entered on CEAP, then the cost\_code selection parameter is 1. If it was the second, the cost\_code selection parameter is 2, etc. This cost\_code selection parameter is the number corresponding to the cost code in the CEAP menu.

## DISTRIBUTION

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