CHAPTER 18

WORKING IN THE ISERIES PROGRAMMING ENVIRONMENT

APPENDIX OBJECTIVES

Upon completion of this appendix, you should be able to

- Sign on and off the computer system.
- Change your user profile.
- Describe the structure of a typical library, source physical file, source member, and object.
- Establish the programming environment.

NAMING CONVENTIONS FOR THIS LAB

Most organizations establish naming convention rules that must be followed when establishing the programming environment. These rules are established to make maintaining the system easier for operators and system administers. They normally apply to the creation of user profiles, output queues, libraries, and so on. Since there are certain objects that cannot have the same name (libraries are one example) it is important that you follow the naming rules at your location.

To establish a programming environment that follows the naming conventions of your location, the following table is provided. Your instructor will provide you with the information needed to complete the table. In this way, you will have pre-assigned names to use as you establish your programming environment.

During the lab, every time you encounter one of the lab names that begin with *user*, replace it with your assigned name from the table below. As you complete the lab assignment, you will create and modify your programming environment to reflect your specific assigned names.

	Lab Name Identified in Commands as:	**Your Assigned Name:**
Profile (User Id.)	userPRF	
Library Name	userLIB	
Output Queue	userOUTQ	

THE SIGN-ON PROCESS

Before signing on to the iSeries Server, every user must obtain a unique User Profile identification and a password. Normally, a system administrator or security officer creates the User Profile. The **User Profile** identifies a user to the system and is that person's unique signature.

A **password** is used in conjunction with the User Profile for security purposes. It is a secret name assigned to a User Profile that prevents others from breaking into a person's account. Thus, for security reasons, passwords should be changed on a regular basis.

Users must sign on to the iSeries Server before a work session can be established. The sign-on screen in Figure 18.1 is used to enter the necessary data into the system so it can identify valid users.

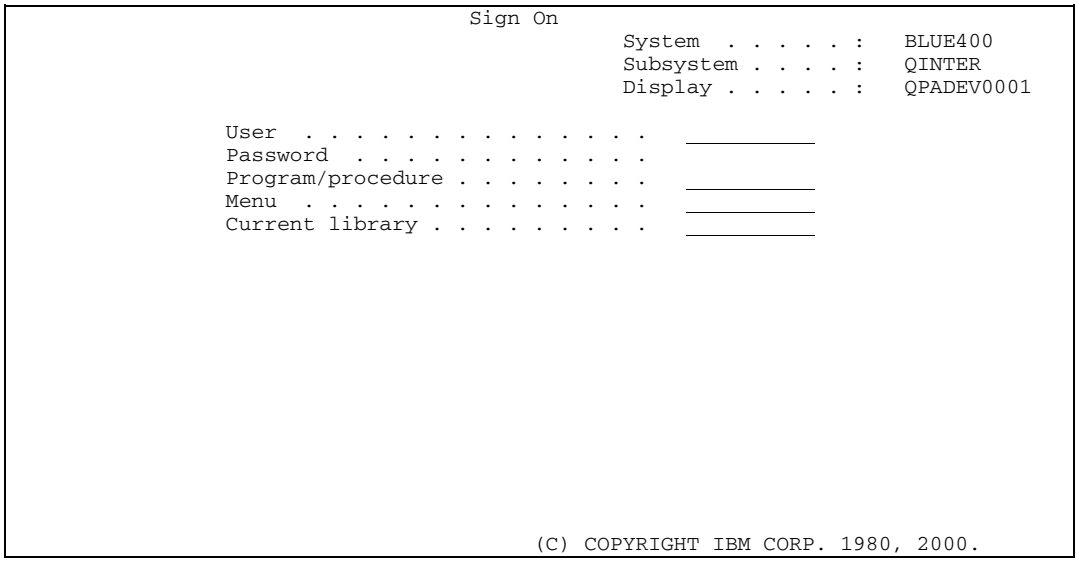

Figure 18.1 Sign-on screen.

THE SIGN-ON SCREEN

The sign-on screen in Figure 18.1 is a specific screen that allows users to identify themselves to the iSeries Server.

- In the upper-right corner of the screen is system information.
  - What is the system name?
  - Which subsystem is your interactive job running in?
  - What is the name assigned to the display station?

The cursor is automatically positioned at the User field. To begin the sign-on procedure

- *Enter* **userPRF** (your User Profile) in the User field.
  Do not press any other keys (i.e., Enter key or Field Exit key) at this time.

Note Normally, you would press Field Exit or Tab next and continue by entering your password. Before we continue, however, let us distinguish between the Enter and Field Exit keys.

With the cursor located at the end of the User field,

- *Press* **Enter**.

You should see a sign-on screen similar to Figure 18.2.

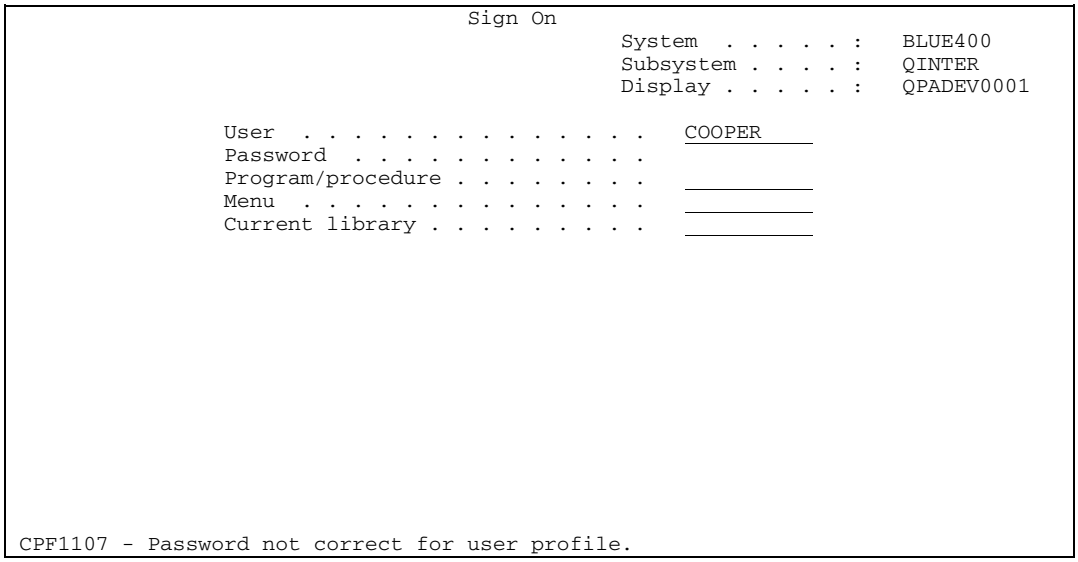

Figure 18.2 Sign-on screen with invalid password error message.

Notice the message at the bottom of the screen. This message tells the user that Enter was pressed and that the information was sent to the computer with an invalid password. Sending the sign-on screen to the computer without entering the password is the same as sending an invalid password.

Remember that Enter is pressed only after all of the required data are entered and the entire screen needs to be sent to the computer. The Enter key is *not* used to move from field to field when entering data on the screen. Instead, the Field Exit key is pressed after entering the User Profile to move to the Password field.

In this case, Enter was pressed after entering the User Profile without entering a password. This is the same as entering an invalid password.

To correct the invalid password error

- *Reenter* **userPRF** in the User field
- *Press* **Field Exit** (right Ctrl key) or **Field Advance** key (Tab key).

Notice that the cursor exits the User field and moves to the Password field.

- *Enter* your **password** on the second line identified as Password.
- *Press* **Enter**. Your User Profile and password are sent to the computer for verification.

Note: If you make an error while keying your User Profile or Password, Tab to the beginning of the User field and rekey your User Profile. Press the Field Exit key to delete everything from your last character to the end of the line and move to the password line. Enter your password and press Enter.

Note
You should change your password often for security reasons. It is your password that prevents others from stealing your identity and signing on to your unique account.

Once you enter the information into the sign-on screen and press Enter, the system verifies that you are an authorized user of the system by checking your User Profile and password. If you have entered the correct User Profile and password, you are now signed on to the system.

THE OS/400 MAIN MENU SCREEN

Once the computer verifies you as a valid user of the system, the `OS/400 Main Menu` in Figure 18.3 is normally the first screen displayed. Figure 18.3 shows all of the options available from the `OS/400 Main Menu`. Depending on your profile set-up and security restrictions, your `OS/400 Main Menu` may contain fewer options.

```
MAIN                              OS/400 Main Menu
                                                          System:   BLUE400
 Select one of the following:

      1. User tasks
      2. Office tasks
      3. General system tasks
      4. Files, libraries, and folders
      5. Programming
      6. Communications
      7. Define or change the system
      8. Problem handling
      9. Display a menu
     10. Information Assistant options
     11. Client Access tasks

     90. Sign off

 Selection or command
 ===> _____________________________________________________________________

 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel   F13=Information Assistant
 F23=Set initial menu
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.3 OS/400 Main Menu screen.

Although the `OS/400 Main Menu` screen is quite different from the sign-on screen, it is typical of all menu screens. Menu screens such as the `OS/400 Main Menu` are divided into several components.

1. The *screen header* is used to identify three attributes to the user:

   a. The *menu name* (`MAIN`) in the upper-left corner is used to distinguish this menu from other menus. Menus are the only display screens that have names.

   b. The *menu title* (`OS/400 Main Menu`) is located in the center of the screen header and is used to describe the purpose of the screen.

   c. In the upper-right corner of the screen is the *system name* (`BLUE400`), which should be the same system name as that shown on the sign-on screen.

2. In the middle of the screen is the numbered list of *menu options*. This list identifies the options by number and provides a description for each option. Note that the last option is a sign-off option and is identified as selection 90.

3. The `Selection or command` line, distinguished by `===> is` located near the bottom after the menu options. This is where the user keys in his or her

selection from the menu. In addition to menu selections, commands that allow users to control the operations of the system can be entered. These commands are part of the operating system's Control Language (CL).

4. Below the command line is a list of *function keys* that are active for this screen. By active, we mean that only those function keys identified in the function key area can be used with this screen. Pressing a function key not listed will result in the system message "Function key not allowed." When there are more active function keys than can be shown on the screen, F24 (More keys) will be active to allow the additional function keys to be displayed.

5. On the last line of the screen is a *message line* that is used by the system to communicate to the user. Normally, the message line displays IBM copyright information or is blank. When the system needs to communicate with the user, a message will be displayed on the message line.

ENTERING COMMANDS AND PARAMETERS

You can enter commands and parameters in a number of different ways. If you are unfamiliar with the parameters of a command, you can enter the command on any command entry line and press F4 to prompt you for a fill-in-the-blanks entry screen showing the required parameters. The command prompter function helps you enter correct information and minimize keystrokes. The command prompter function also provides help for each parameter to help you fill in the values.

If you know the *positional form* of the command, you can enter a command followed by the parameter values excluding the parameter names. The parameters must be entered in the correct sequence. Values are separated by one or more blanks. The `CRTLIB` command would look like this:

```
CRTLIB JILLLIB *PROD TEXT('Library for Jill Programmer')
```

Notice the apostrophes surrounding the text entry. The `TEXT` parameter expects a single value to be entered. If there were no apostrophes, the system would consider each blank (space) to be the end of a value. The apostrophes tell the system to treat everything within the apostrophes as a single value.

SIGNING OFF

We illustrate the sign-off procedure here so you will have the necessary information about signing off the computer system if the need arises before you finish this lab in its entirety.

There are two ways to sign off the system. In Figure 18.4, the user is signing off by entering option 90 on the command line. Option 90 can be used on any menu screen that has the Sign off option (option 90).

Figure 18.5 shows how the `signoff` command is entered to sign off the system. The `signoff` (or `SIGNOFF`) command can be entered on any screen that has a command line. Remember, commands are not case sensitive and can be entered in any combination of upper and lower case. To sign off,

- *Enter* **signoff** or **SIGNOFF** on the command line.
- *Press* **Enter**.

Your work session is ended, and you are returned to the Sign on screen.

```
MAIN                            OS/400 Main Menu
                                                          System:   BLUE400
 Select one of the following:

      1. User tasks
      2. Office tasks
      3. General system tasks
      4. Files, libraries, and folders
      5. Programming
      6. Communications
      7. Define or change the system
      8. Problem handling
      9. Display a menu
     10. Information Assistant options
     11. Client Access tasks

     90. Sign off

 Selection or command
 ===> 90
 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel   F13=Information Assistant
 F23=Set initial menu
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.4 Entering 90 on the command line of the Main Menu screen to sign off.

```
MAIN                            OS/400 Main Menu
                                                          System:   BLUE400
 Select one of the following:

      1. User tasks
      2. Office tasks
      3. General system tasks
      4. Files, libraries, and folders
      5. Programming
      6. Communications
      7. Define or change the system
      8. Problem handling
      9. Display a menu
     10. Information Assistant options
     11. Client Access tasks

     90. Sign off

 Selection or command
 ===> signoff
 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel   F13=Information Assistant
 F23=Set initial menu
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.5 Entering the signoff command on the command line to sign off.

Note
The OS/400 operating system is not case sensitive when entering commands. So, `signoff` is the same as entering `SIGNOFF`.

You now know the sign-on and sign-off procedures. Sign back on to the system now and continue with the lab. If you need help with the sign-on procedure, refer to the earlier session about signing on.

Note
Although you have signed off, you may not have disconnected the PC from the communications line that linked the PC to the server. Since there are different methods used to disconnect a workstation from the server, we will not discuss them here. Your instructor will describe the necessary procedures.

CHANGING YOUR PASSWORD

Since it is important to protect your password and change it often, let us examine how to change your password. There are several methods that can be used to change your password. We will demonstrate two methods here.

1. Navigating the menus
2. Using CL (Control Language) commands

NAVIGATING THE MENUS TO CHANGE YOUR PASSWORD

Menus help you get started on a task by providing a list of options from which to choose. Using menus is easier to learn than entering a long string of commands each time you want to perform a task because you do not have to remember any command names.

Examine the options on the `OS/400 Main Menu` and try to determine which selection might be used to change your password. Sometimes the menu descriptions are not clear enough to determine which selection is correct. Guessing at menu selections is allowed and sometimes welcomed as a method of learning new concepts. If you guess incorrectly, Function key F3 (Exit) and F12 (`Cancel`) can be used to backtrack to the `OS/400 Main Menu`.

Changing your password is a user function. So, option 1 (User tasks) is the required option on the `OS/400 Main Menu` to begin the menu navigation that allows you to change your password. To select an option from a menu screen, enter the number corresponding to your menu selection on the command line and press Enter.

To select the `Usertasks` option from the `OS/400 Main Menu`:

- *Enter* **1** on the `Selection or command ===>` line.
- *Press* **Enter**.

Figure 18.6 illustrates the User Tasks menu named `USER` that results from selecting option 1 from the `OS/400 Main Menu`. Note that the User Tasks menu screen has the same format as the `OS/400 Main Menu` screen.

```
USER                                User Tasks
                                                          System:   BLUE400
 Select one of the following:

      1. Display or change your job
      2. Display messages
      3. Send a message
      4. Submit a job
      5. Work with your spooled output files
      6. Work with your batch jobs
      7. Display or change your library list
      8. Change your password
      9. Change your user profile

     60. More user task options

     90. Sign off

 Selection or command
 ===> _____________________________________________________________________

 F3=Exit    F4=Prompt    F9=Retrieve    F12=Cancel    F13=Information Assistant
 F16=OS/400 Main menu
```

Figure 18.6 User Tasks menu.

The `User Tasks` menu provides a selection of different options relating to user-specific tasks. It is easy to see that option 8 is the option that you are looking for to change your password.

To change your password, on the User Tasks menu screen:

- *Enter* **8** on the `Selection or command line ===>`
- *Press* **Enter**.

The `Change Password` screen, shown in Figure 18.7, is displayed. This screen is referred to as an *entry screen* because it displays a fill-in-the-blanks screen for the user to enter the necessary parameters for the command. If you wish to return to the `User Tasks` menu without changing your password, press the F12 key (Cancel) or F3 key (Exit).

```
                                Change Password

Password last changed . . . . . :  08/31/02

Type choices, press Enter.

  Current password  . . . . . .

  New password  . . . . . .

  New password (to verify)  . . . . . .









F3=Exit           F12=Cancel
```

Figure 18.7 Change password screen.

To change your password,

- *Enter* your **current password** in the `Current password` field.
- *Press* the **Field Exit key** (right Ctrl key).

Now you have to decide on a new password. Try to make you password a series of letters and numbers that only you will know. For example, use the first character of each word in a phrase, such as "My birthday is May 15," where the password would be MBIM15.

Also, your new password cannot be the same as your current password. If you try to enter a new password that is the same as your current password, the system will respond with the message, "New password cannot be same as current password."

- *Enter* your **new password** in the `New password` field.
- *Press* the **Field Exit key**.

- *Enter* the **new password** a second time in the `New password` (to verify) field.
- *Press* **Enter** to send the data to the server.

The system will return you to the `User Tasks` screen and respond with the message "`Password changed successfully`."

- *Press* **F3** (Exit) or **F12** (Cancel) to return to the `OS/400 Main Menu`.

THE CHGPWD (CHANGE PASSWORD) COMMAND

Another method that can be used to change your password is to enter the CL command directly on a command line as shown in Figure 18.8. The `CHGPWD` command, as with all other commands, can only be entered on a display screen that contains a command line at the bottom of the screen. The `OS/400 Main Menu` is an example of a screen that contains a command line from which the `CHGPWD` command can be submitted for execution.

To change your password with the Change Password (`CHGPWD`) command,

- *Enter* **CHGPWD** on the `Selection or command line ===>`
- *Press* **Enter**.

```
MAIN                              OS/400 Main Menu
                                                          System:   BLUE400
 Select one of the following:

      1. User tasks
      2. Office tasks
      3. General system tasks
      4. Files, libraries, and folders
      5. Programming
      6. Communications
      7. Define or change the system
      8. Problem handling
      9. Display a menu
     10. Information Assistant options
     11. Client Access tasks

     90. Sign off

 Selection or command
 ===> chgpwd
 F3=Exit    F4=Prompt    F9=Retrieve    F12=Cancel    F13=Information Assistant
 F23=Set initial menu
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

*Figure 18.8 Entering the **CHGPWD** command.*

The system displays the Change Password fill-in-the-blanks entry screen, showing the parameters that are required by the `CHGPWD` command. Figure 18.7 shows the Change Password entry screen. Following Figure 18.7 are the necessary steps to change your password.

DATA STORAGE AND SYSTEM OBJECTS

The iSeries Server is and object-oriented computer, meaning that everything is stored as an object. An **object** can best be described as an entity that exists on the system upon which procedures can be performed by the system. There are many types of objects. Some of the more common objects that are discussed in this book include computer program objects, data file objects, and library objects.

The iSeries Server employs the object-based architecture concept in its operating system. **Object-based architecture** means that every stored entity on the system, no matter whether it is a program, a file, or a user profile, is referenced by its name rather than by its location. Whenever the system needs to

perform an action on an object, the system will automatically verify that the requested action to be performed is valid for that object.

Every object has descriptive attributes or characteristics stored with it that define it to the system. Some of these attributes include the name of the object, the size of the object, date of creation, who has authority to use the object, who created the object, and an identification of the object's contents. It is from these attributes that the system determines which procedures can be performed on the object. Thus, when the system works with an object, it uses the attributes stored with that object to control the way in which the object is used by the operating system.

LIBRARIES, FILES, AND MEMBERS

LIBRARIES

A **library**, which is itself an object, is the highest-level object type. Libraries are normally used as repositories for related objects and they serve as a directory for finding objects by name. The system can contain any number of libraries, with each library containing any number of objects.

Everything created and used by the system must be in object form. Objects stored in a library are usually related. For example, students will normally have one library in which all of their objects (programs, etc.) are stored. In an organization, on the other hand, one library may contain all the objects pertaining to the inventory application system, while another library contains the objects for the payroll application.

Objects that are the same type and stored in the same library must have unique names. That is, every COBOL program stored in a specific library must have a unique name, as must every file stored in the same library. Also, two data files in the same library cannot have the same name, but a data file and a program in the same library can have the same name, as shown in Figure 18.9. Thus, the same name can be used for different object types.

In Figure 18.9, the *data file* `EMPMST`(file) and *program* `EMPMST`(pgm) can have the same name because they are two different types of objects. The OS/400 operating system knows which object to use based on the object's type. For example, if a user wishes to `CALL` or execute the program `EMPMST`, the system determines that the *program* object is to be executed (`CALL`ed) since programs are called. It would not make sense for the operating system to call a file.

A CL program with the name `EMPMST`(pgm) could not be stored in this library because all programs, whether they are COBOL or CL programs, are a specific object type and must have unique names. Since the naming rule applies to the object type, each program name must be different, even though one program may be a COBOL program whereas a second program may be a CL program.

Contents of EMPPAYLIB	
EMPMST(pgm)	EMPMST(file)
EMPPGM1(pgm)	QDDSSRC(file)
EMPPGM2(pgm)	QCBLSRC(file)

OBJECTS IN LIBRARY EMPPAYLIB		
Object Type	**Object Name**	
pgm file	EMPMST EMPMST	The same name can be used for different object types. Since the first object is a program and the second object is a file, they are allowed to have the same name. The system determines which operations can be performed on the object based on its type.
pgm pgm	EMPPGM1 EMPPGM2	All objects of the same type must have different names.
pgm (COBOL) pgm (CL)	UPDPROG UPDPROG	These two objects cannot have the same name because they are the same object type. Although the first program is a COBOL program and the second program is a CL program, they are considered PGM objects since the system does not distinguish between sub-object types.

Figure 18.9 Content of EMPPAYLIB.

SOURCE PHYSICAL FILES AND SOURCE MEMBERS

A software developer writes a program's instructions using a programming language such as COBOL/400. The list of programming language instructions, referred to as **source code**, tells the computer what is to be done. Source members are stored in a source file or source physical file. A **source physical file** is a repository where source members are stored as actual source code, not as objects.

When a source member, such as a COBOL/400 program or data file, is compiled, the resulting object is stored in a library. The objects compiled from source members do not have to be stored in the same library as the source member from which the object was created. Some organizations create libraries with source physical files that contain all the source members for an application. As these source members are compiled into objects, they are stored in separate production libraries that contain only objects. Other organizations set up libraries by application by storing the source physical files containing source members and their compiled objects in the same production libraries. In this environment, for example, all programs and files for the payroll application would be stored in one production library. The convention in some organizations is to establish a source physical file for each type of source member. For example, a source physical file is created for COBOL programs, one for CL programs, another for RPG programs, and yet another for DDS source. When this method is used, the conventional names for these source files are QCBLSRC, QCLPSRC, QRPGSRC, and QDDSSRC, respectively.

When a source member, such as a COBOL program or data file, is compiled, the library in which the resulting object is stored is specified on the create command. If the default value is used, the compiled object of a source member will be stored in the same library as the source member. The source physical file itself is stored as an object in a library, as shown in Figure 18.10, and can contain several source members.

The two source physical files called QCBLSRC and QDDSSRC are objects that contain source specifications. QCBLSRC contains source specifications for COBOL programs, whereas QDDSSRC contains source specifications for data files. EMPPGM1 in QCBLSRC and EMPMSTPF in QDDSSRC are referred to as **source members** because they contain the actual source specifications for the EMPPGM1

source COBOL program and EMPMSTPF data file. When these source members are compiled successfully, the result of each compile will be an object.

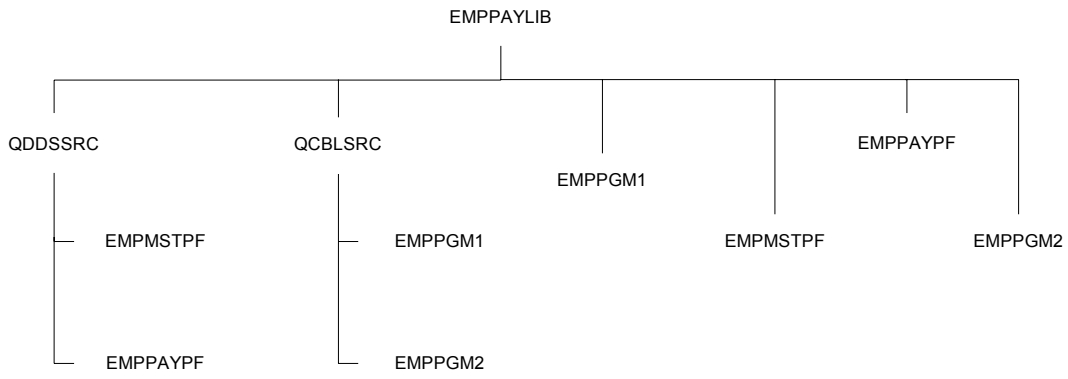

Figure 18.10 Typical hierarchy of a library.

As each member is added to a source physical file, it is important to ensure that the right member type of DDS (database file), CBL (COBOL program), and so on is specified. When source code is entered with the Source Entry Utility (SEU), a member type may be prompted (F4) so that source can be entered correctly; preliminary syntax checking is done at entry time.

TYPES OF LIBRARIES

There are three types of libraries. **System libraries** are established when the operating system is installed. These libraries contain data that are used system wide by the operating system and thus are in effect for every job on the system. **Product libraries** support the different programming languages and utility products used by software developers. Like system libraries, these libraries are established when the operating system is installed. Users have little control over system and product libraries.

User libraries are the libraries created by individual users. Each user can have more than one user library. However, there can be only one current or default library, called the **current library**, for each user. When a user issues a command to perform a task on an object, the current library is searched before any other user-defined libraries.

LIBRARY LIST

Since the system contains so many libraries, a user may need to have access to several libraries during a work session. A **work session** is the time between the user signing onto, and signing off of, the system.

When a particular job requires the use of an object, there are two methods that can be used to tell the operating system where to find the object. The first, the explicit method, is used by specifying the name of the library where the object is stored along with the name of the object. For example, to use the data file object EMPMSTPF in library EMPPAYLIB, EMPPAYLIB/EMPMSTPF is specified. This explicitly indicates that the file EMPMSTPF is stored in the EMPPAYLIB library.

The **default method** is the second way the operating system can locate a specific object. By *default method*, we mean that the operating system finds the object by searching through a list of libraries that is current for your job.

When a profile is created for a user, a set of default libraries is also established for that user. Included in these libraries will be some system libraries and product libraries. As well, the user may create one or more individual user libraries. The **library list** is a method used to maintain the libraries associated with a user job. It determines what a user might be able to do during that session and where his or her programs and data files reside.

If a user executes a program that requires the `EMPMSTPF` file, and the library in which `EMPMSTPF` is located was not specified, the system searches the library list and examines each library looking for `EMPMSTPF`. The system stops searching for `EMPMSTPF` when it finds the first instance of the file or when there are no more libraries to search. If the system does not find the object, it sends a message to the user stating that the object was not found in the library list.

The type of library listed determines the order in which the library list is searched. If a library is designated as the Current Library, then that library is searched first. The library list search order is

LIBRARY LIST SEARCH ORDER	
Current	(CUR)
System	(SYS)
Product	(PRD)
User	(USR)

One reason for letting the system search the library list for an object is to allow the software developer to use different libraries to control software testing. By using a library list the software developer can have objects of the same type and name in different libraries. This provides an easy method for software testing by allowing the software developer to obtain different test results by just changing the library list. A software developer's library list can be changed so that a test library, which includes test programs and test files, may be searched before a production library is searched.

The command to view a user's library list is `DSPLIBL`. Figure 18.11 shows the display screen as a result of executing the `DSPLIBL` command. Note that even though the system (Type=SYS) libraries are shown first, the current library (Type=CUR) is always the first library searched. Other user libraries (Type=USR) are searched in the order in which they are displayed on the screen. The current and user portions of the library list can be changed either temporarily or permanently, depending on circumstances.

```
                                Display Library List
                                                              System:   BLUE400


Type options, press Enter.
  5=Display objects in library

Opt  Library     Type      Text
 _   QSYS        SYS       System Library
 _   QSYS2       SYS       System Library for CPI's
 _   QHLPSYS     SYS
 _   QUSRSYS     SYS       SYSTEM LIBRARY FOR USERS
 _   COBOLLIB    CUR       Personal Library for COBOLLIB
 _   QGPL        USR       General Purpose Library
 _   QTEMP       USR




                                                                        Bottom
F3=Exit   F12=Cancel   F17=Top   F18=Bottom
(C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.11 Display library list screen as a result of executing the DSPLIBL command.

Normally, any name beginning with 'Q' indicates system-derived objects. This means that these objects are, either by installation or IBM convention, installed with the system and are system defaults. When new releases of the operating system are installed, the 'Q' libraries are overlaid, so it is not recommended that users store data in them. Each user should create a library to minimize use of 'Q' libraries.

ESTABLISHING THE PROGRAMMING ENVIRONMENT

There are several tasks that a system developer needs to complete before designing and creating programs on the iSeries Server. In addition, there are other tasks that can be completed to help the new software developer become more efficient. The table below identifies the tasks needed to set up the programming environment.

STEPS FOR ESTABLISHING THE PROGRAMMING ENVIRONMENT
• Create a library • Change the current library • Create a source physical file to store COBOL/400 programs • Create an output queue • Change the default values of your profile to automatically establish your environment when you sign on • Change your message delivery mode • Change your output queue

Not all of the tasks mentioned above will have to be completed before the actual application development process begins. Most of these tasks, however, will undoubtedly be completed at some time for the system developer to function in an effective manner.

CREATING A LIBRARY

There are several methods that can be used to create libraries. Let us consider three methods with which libraries can be created.

USING THE MENU SYSTEM TO CREATE A LIBRARY

For the beginner, the menu system may be one of the easiest ways to get around the system. It offers a step-by-step approach for locating the task that is to be executed.

To begin the search for the command that will create a library, select the `Files, libraries, and folders` option on the `OS/400 Main Menu` screen,

- *Enter* **4** on the `Selection or command ===> line.`
- *Press* **Enter**.

Option 4 from the `OS/400 Main Menu` screen will display the `Files, libraries, and folders` screen that is identified by the display screen name `DATA`. As the name implies, this option will allow you to perform library tasks. From this menu, select the `Libraries` option.

- *Enter* **2** on the `Selection or command ===>` line.
- *Press* **Enter**.

The Libraries screen identified by the name `LIBRARY` in the upper left-hand corner is displayed. At the Library menu screen, select the option to create a library.

- *Enter* **2** on the `Selection or command ===>` line.
- *Press* **Enter**.

After option 2 is selected, the fill-in-the-blanks entry screen for the Create Library (`CRTLIB`) command is displayed. Next, enter the necessary information.

- *Enter* **userLIB** in the Library field, where userLIB is the name of the library you wish to create.
- *Press* **Enter**.

Once you have submitted the command to create a library, the system returns to the `Files, libraries, and folders` screen. At the bottom of the screen, the system displays the message "`Library userLIB created`."

- *Press* **F3** (Exit) until you return to the `OS/400 Main Menu`.

USING THE GO COMMAND

When using the menu system to perform a task such as creating a library you will notice that the menu screens have a name in the upper left-hand corner. This name is used to identify the screen to the system and can be used by the user to quickly advance to a particular screen. In the case of creating a library, the user could have gone directly to the `LIBRARY` screen by entering the `GO` command on the command line of the `OS/400 Main Menu`. When a `GO` command is entered with the screen name as its parameter, the system will automatically branch to (go to) that screen. Thus, this method can be used when you become more familiar with the names of the screens. To illustrate the `GO` command, branch to the `LIBRARY` screen:

- *Enter* **GO LIBRARY** on the `Selection or command ===>` line.
- *Press* **Enter**.

As you can see, the system displays the Libraries screen without having to navigate through the other menu screens to get there. Since you have already used the Libraries screen, return to the `OS/400 Main Menu` screen:

- *Press* **F3** (Exit).

THE CREATE LIBRARY (CRTLIB) COMMAND

The shortest and simplest method to create a library is to enter the CL command directly onto a command line as shown in Figure 18.12. The `CRTLIB` command, as with all other commands, can only be entered on a display screen that contains a command line at the bottom of the screen. The `OS/400 Main Menu` is an example of a screen that contains a command line from which the `CRTLIB` command can be submitted for execution.

To create a library, use the Create Library (`CRTLIB`) command:

- *Enter* **CRTLIB** on the `Selection or command ===>` line.
- *Press* **F4** (Prompt).

```
MAIN                              OS/400 Main Menu
                                                          System:   BLUE400
 Select one of the following:

      1. User tasks
      2. Office tasks
      3. General system tasks
      4. Files, libraries, and folders
      5. Programming
      6. Communications
      7. Define or change the system
      8. Problem handling
      9. Display a menu
     10. Information Assistant options
     11. Client Access tasks

     90. Sign off

 Selection or command
 ===> crtlib
 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel   F13=Information Assistant
 F23=Set initial menu
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.12 Entering the CRTLIB (Create library) command.

The system displays the Create Library (`CRTLIB`) fill-in-the-blanks entry screen showing the parameters that are required by the `CRTLIB` command. Figure 18.13 shows the Create Library (`CRTLIB`) entry screen with the parameters filled in.

```
                              Create Library (CRTLIB)
Type choices, press Enter.

Library  . . . . . .  . . .   userLIB       Name
Library type . . . . . . . .   *PROD        *PROD, *TEST
Text 'description' . . . . . . . Jill Programmer's Library

                                                                        Bottom
F3=Exit   F4=Prompt   F5=Refresh   F10=Additional parameters   F12=Cancel
F13=How to use this display        F24=More keys
```

Figure 18.13 Completed Create Library (CRTLIB) entry screen.

To create a library with the Create Library (CRTLIB) entry screen,

- *Enter* **userLIB** and *press* the **Tab key** *twice* to go to the text description line.
- *Enter* a brief **description** of the library on the text description line (e.g., Jill Programmer's library).

The Library type defaults to PROD for *production*.

- Press **Enter** to send the information to the server.

If all options of the CRTLIB command are successful, the system returns to the screen from which the CRTLIB command was executed. Also, a message is displayed at the bottom of the screen, as shown in Figure 18.14, indicating that the library is created.

```
MAIN                          OS/400 Main Menu
                                                        System:   BLUE400
Select one of the following:

     1. User tasks
     2. Office tasks
     3. General system tasks
     4. Files, libraries, and folders
     5. Programming
     6. Communications
     7. Define or change the system
     8. Problem handling
     9. Display a menu
    10. Information Assistant options
    11. Client Access tasks

    90. Sign off

Selection or command
===> ____________________________________________________________________

F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel   F13=Information Assistant
F23=Set initial menu
Library userLIB created.
```

Figure 18.14 Library created message.

Guideline
Libraries start with the letter *Q*. You should not name your library with anything that starts with a *Q*.

CHANGING YOUR CURRENT LIBRARY

The **current library** is the default library that is searched first by the operating system when an object is specified without its library location. For students, assigning a current library is very convenient because most, if not all, of the work you perform will be in one library. The Change Current Library (CHGCURLIB) command is used to change your current library.

To change your current library:

- *Enter* **CHGCURLIB userLIB** on the `Selection or command ===>` line, where **userLIB** is the name of the library that you wish to assign as your current library.
- *Press* **Enter**.

CREATING A SOURCE PHYSICAL FILE

A **source physical file** is an object used to store source specifications that the system can then use to create objects. Source specifications for database files (Data Description Specifications—DDS) and COBOL programs, are stored in source physical files. IBM has supplied standard names for source physical files. Two examples include QDDSSRC for database files (DDS) and QCBLSRC for COBOL (CBL) program.

Source physical files, such as QDDSSRC and QCBLSRC, are objects that are created in a library to store source specifications. Thus, each library may contain any number of source physical files.

Let us create two source physical files called QDDSSRC and QCBLSRC in your library. The Create Source Physical File (CRTSRCPF) command shown in Figure 18.15 is used to create source physical files.

- *Enter* **CRTSRCPF**.
- *Press* **F4** (Prompt).

```
MAIN                              OS/400 Main Menu
                                                        System:   BLUE400
 Select one of the following:

      1. User tasks
      2. Office tasks
      3. General system tasks
      4. Files, libraries, and folders
      5. Programming
      6. Communications
      7. Define or change the system
      8. Problem handling
      9. Display a menu
     10. Information Assistant options
     11. Client Access tasks

     90. Sign off

 Selection or command
 ===> crtsrcpf
 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel   F13=Information Assistant
 F23=Set initial menu
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.15 Entering the CRTSRCPF command.

Once the CRTSRCPF command is executed, the Create Source Physical File (CRTSRCPF) entry screen appears. The completed entry screen for the Create Source Physical File (CRTSRCPF) is shown in Figure 18.16. The parameters are filled in as follows:

- *Enter* **qddssrc** in the File field and *press* the **Field Exit key**.
- *Enter* your **userLIB** name in the Library field.
- *Press* the **Tab key** until the cursor is in the Text 'description' field.
- *Enter* the description **Source PF for Database Files** in the Text 'description' field.
- *Press* **Enter** to send the information to the server.

You should receive the following message:

```
File QDDSSRC created in library userLIB
```

where userLIB is the name of the library you specified in the Library field of the CRTSRCPF entry screen.

```
                    Create Source Physical File (CRTSRCPF)

Type choices, press Enter.

File . . . . . .   qddssrc       Name
  Library  . . . . . .    userLIB     Name, *CURLIB
Record length  . . . . . .  92           Number
Member, if desired . . . . .  *NONE        Name, *NONE, *FILE
Text 'description' . . . . . .  'Source PF for Database Files'

                                                                    Bottom
F3=Exit   F4=Prompt   F5=Refresh   F10=Additional parameters   F12=Cancel
F13=How to use this display        F24=More keys
```

Figure 18.16 Create Source Physical File (CRTSRCPF) screen.

Note: Using the Create Source Physical file (CRTSRCPF) command to create a source physical file without specifying a library, will automatically put the file in your current library.

Entering the command CRTSRCPF and the required parameters could have created the Source Physical File. To demonstrate this, let us create a source physical file named QCBLSRC for COBOL programs by entering the following command on the command entry line:

- *Enter* **CRTSRCPF FILE(QCBLSRC) TEXT('Source PF for COBOL Programs')** on the Selection or command ===> line.
- *Press* **Enter**.

You should receive the following message:

```
File QCBLSRC created in library userLIB,
```

where userLIB is the name of your current library, since no library was specified in the CRTSRCPF command.

CREATING AN OUTPUT QUEUE

The processing you do normally results in some form of printed output. Printed output, called **spooled files**, is normally stored in an output queue until it isready to be printed. We can then selectively move the files in our output queue to an output queue attached to a printer writer.

In an academic environment it is easier to maintain the system if all students use the same output queue. Thus, an output queue called CISOUTQ could be created and shared by all students. This output queue would be cleared on a regular basis so there would not be a buildup of unwanted output.

If you were in a nonacademic environment, that is, working on an iSeries Server in an industry setting, each person could have his or her own output queue.

Depending upon the particular environment you are working in, students may be requested to create their own individual output queue or share an output queue that has already been created for them. Your instructor will inform you of the procedure that you are to follow concerning your output queue.

Figure 18.17 shows the CRTOUTQ command being entered on the command line. If you wish to create your own personal output queue, complete the following steps:

Enter **CRTOUTQ** on the `Selection or command ===> line`.
- *Press* **F4 (Prompt)**.

```
MAIN                              OS/400 Main Menu
                                                          System:   BLUE400
 Select one of the following:

      1. User tasks
      2. Office tasks
      3. General system tasks
      4. Files, libraries, and folders
      5. Programming
      6. Communications
      7. Define or change the system
      8. Problem handling
      9. Display a menu
     10. Information Assistant options
     11. Client Access tasks

     90. Sign off

 Selection or command
 ===> crtoutq
 F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel   F13=Information Assistant
 F23=Set initial menu
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.17 Entering the CRTOUTQ command.

After pressing F4 (Prompt), the Create Output Queue (CRTOUTQ) fill-in-the-blanks entry screen appears showing the parameters required by the CRTOUTQ command. The completed entry screen for the Create Output Queue (CRTOUTQ) command is shown in Figure 18.18. On the Create Output Queue (CRTOUTQ) fill-in-the-blanks entry screen, the parameters are filled in as follows:

- *Enter* **userOUTQ** in the Output queue field.
- *Press* the **Field Exit key.**
- *Enter* **userLIB** in the Library field.
- *Press* **F10** for Additional parameters.
- *Press* the **Tab key** until the cursor is in the Text 'description' field.
- *Enter* a brief **description** of the output queue on the text description line (e.g., Jill Programmer's output queue).
- *Press* **Enter** to send the information to the server.

You should receive the message:

```
Object userOUTQ type *OUTQ created in library userLIB.
```

where userOUTQ is the name of your output queue and userLIB is the name of your library.

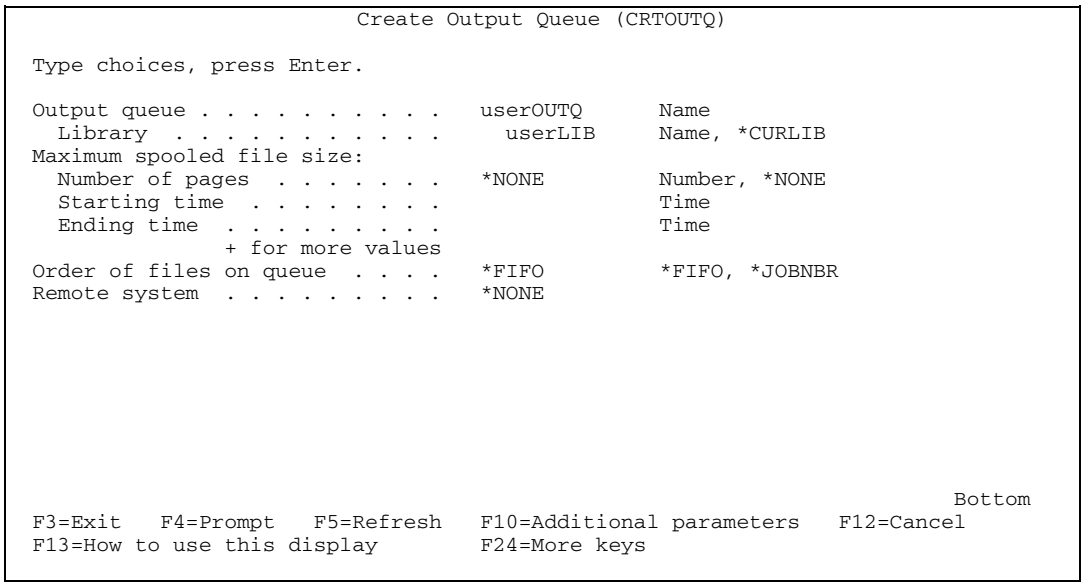

Figure 18.18 Create Output Queue (CRTOUTQ) screen.

Instead of using the F4 Prompt screen to enter the parameters, the `CRTOUTQ` command may be entered directly on any command line with all the required parameters. Thus, executing the following CL command could have created the output queue userOUTQ:

Enter **`CRTOUTQ OUTQ(userOUTQ) TEXT('your-name output-queue')`** on the `Selection or command ===>` line.

When you create a spooled output file, such as output from a COBOL program, the file is placed in your output queue. Each output queue contains an ordered list of spooled output files. This allows you to use certain commands to display the spooled output at your workstation and then selectively print or delete the spooled output. Normally, a software developer would not print all of the spooled output that is created.

MESSAGE QUEUES

When your user profile is created, the system automatically creates a message queue for you using the same name as your user profile. All messages sent to you from the system or from other users are placed in this queue.

When you submit batch work (such as a COBOL compile of source code), the system will send a message to your user message queue describing whether the job completed normally (the object was created) or the job completed abnormally (there were errors in the source that prevented the successful creation of an object).

When your profile is created, the mode of delivery of your messages from your message queue can be notify or break. **Notify** means that you will be notified when you receive a message and will not see your messages unless you display them from your message queue. Entering the Display Message (DSPMSG) command on any command line can do this.

Rather than using the `DSPMSG` command each time you want to see your messages, many users prefer to be informed immediately when a message arrives. This is known as break mode. **Break** means that whenever a message is sent to your message queue, it will automatically break into whatever you are working on and be displayed on the screen immediately. You can set your message delivery mode to break by changing the message delivery mode attribute of your user profile.

CHANGING YOUR USER PROFILE TO ESTABLISH A WORKING ENVIRONMENT

Each time you sign on, you normally want to work in the same environment. Rather than telling the system about your working environment each time you sign on, the system allows you to specify various working environment attributes in your user profile. Once these attributes are specified in your user profile, the system will use these attributes to establish your working environment every time you sign on.

The most common attributes that students might consider changing are listed here:

User Profile Attributes
Current Library
Output Queue
Delivery Mode of User Messages

Your instructor will tell you which of these user profile attributes to change. If you choose to make these changes to your user profile, follow these steps by using the Change Profile (`CHGPRF`) command to make the necessary changes.

CHANGE PROFILE COMMAND

Note: Before making the following changes to your profile, be sure you have created a library and an output queue, if they have not been created for you. These objects should be created before they are entered into your user profile. If you change the current library field in your user profile without creating the library first, the system will lock you out of your account the next time you try to sign on. If this happens, you will have to notify your instructor or the security officer to have your user profile corrected.

Users use the CHGPRF command in Figure 18.19 to change their personal user profile. To change your user profile:

- *Enter* **CHGPRF** on the Selection or command ===> line.
- *Press* **F4** (Prompt).

```
MAIN                              OS/400 Main Menu
                                                              System:   BLUE400
 Select one of the following:

      1. User tasks
      2. Office tasks
      3. General system tasks
      4. Files, libraries, and folders
      5. Programming
      6. Communications
      7. Define or change the system
      8. Problem handling
      9. Display a menu
     10. Information Assistant options
     11. Client Access tasks

     90. Sign off

 Selection or command
 ===> chgprf
 F3=Exit    F4=Prompt    F9=Retrieve    F12=Cancel    F13=Information Assistant
 F23=Set initial menu
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.19 Entering the CHGPRF command.

The system displays the Change Profile (CHGPRF) fill-in-the-blanks entry screen showing the required parameters of the CHGPRF command. Remember, do not press Enter on the CHGPRF entry screen until you are sure all parameters are correct. Use the Field Exit key or Tab key to move between fields. Again, entering incorrect data into your user profile may leave you locked out of your account.

The completed entry screen for the Change Profile (CHGPRF) command is shown in Figure 18.20. To change your current library, output queue, and message delivery mode, perform the following steps:

- *Press* the **Tab key** until the cursor is located at the Current library field.
- *Enter* **userLIB** in the current library field, where **userLIB** is the name of the library you wish to assign as your current library.
- *Press* the **Tab key** until the cursor is located in the Text 'description' field.
- *Enter* a brief **description** of your user profile (e.g., Jill Programmer's User Profile).
- *Press* the **F10 key** for Additional parameters.
- *Press* the **Page Down key** to show the additional parameters that need to be changed.

```
                              Change Profile (CHGPRF)

Type choices, press Enter.

Assistance level . . . . . .   *SYSVAL       *SAME, *SYSVAL, *BASIC...
Current library  . . . . . .   userLIB       Name, *SAME, *CRTDFT
Initial program to call  . . .   *NONE        Name, *SAME, *NONE
  Library  . . . . . .                       Name, *LIBL, *CURLIB
Initial menu . . . . . .   MAIN              Name, *SAME, *SIGNOFF
  Library  . . . . . .     *LIBL            Name, *LIBL, *CURLIB
Text 'description' . . . . . .   'Jill Programmer's User Profile'

                                                                      Bottom
F3=Exit   F4=Prompt   F5=Refresh   F10=Additional parameters   F12=Cancel
F13=How to use this display        F24=More keys
```

Figure 18.20 Change profile (CHGPRF) screen.

- *Press* the **Tab key** until the cursor in located in the Delivery field.
- *Enter* ***break** in the delivery field.
- *Press* the **Tab key** until the cursor is located in the Output queue field.
- *Enter* **userOUTQ** in the Output queue field
- *Press* the **Field Exit key** or **Tab key**.
- *Enter* **userLIB** in the Library field.

```
                        Change Profile (CHGPRF)

Type choices, press Enter.
Assistance level . . . . . .   *SYSVAL       *SAME, *SYSVAL, *BASIC...
Current library  . . . . . . > userLIB       Name, *SAME, *CRTDFT
Initial program to call  . . .   *NONE        Name, *SAME, *NONE
  Library  . . . . . .                       Name, *LIBL, *CURLIB
Initial menu . . . . . .   MAIN              Name, *SAME, *SIGNOFF
  Library  . . . . . .     *LIBL            Name, *LIBL, *CURLIB
Text 'description' . . . . . .   'Jill Programmer's User Profile'



                            Additional Parameters

Keyboard buffering . . . . . .   *SYSVAL       *SAME, *SYSVAL, *NO...
Job description  . . . . . .   QDFTJOBD      Name, *SAME
  Library  . . . . . .     QGPL             Name, *LIBL, *CURLIB
Document password  . . . . . .   *SAME        Name, *SAME, *NONE


                                                                    More...
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
```

```
                          Change Profile (CHGPRF)

Type choices, press Enter.
Message queue  . . . . . .   userPRF       Name, *SAME, *USRPRF
  Library  . . . . . . . .     QUSRSYS     Name, *LIBL, *CURLIB
Delivery . . . . . . . . .   *break        *SAME, *NOTIFY, *BREAK...
Severity code filter . . .   0             0-99, *SAME
Print device . . . . . . .   *WRKSTN       Name, *SAME, *WRKSTN, *SYSVAL
Output queue . . . . . . .   userOUTQ      Name, *SAME, *WRKSTN, *DEV
  Library  . . . . . . . .     userLIB     Name, *LIBL, *CURLIB
Attention program  . . . .   *SYSVAL       Name, *SAME, *NONE...
  Library  . . . . . . . .                 Name, *LIBL, *CURLIB
Sort sequence  . . . . . .   *SYSVAL       Name, *SAME, *SYSVAL, *HEX...
  Library  . . . . . . . .                 Name, *LIBL, *CURLIB
Language ID  . . . . . . .   *SYSVAL       *SAME, *SYSVAL...
Country ID . . . . . . . .   *SYSVAL       *SAME, *SYSVAL...
Coded character set ID . .   *SYSVAL       *SAME, *SYSVAL, *HEX...
User options . . . . . . .   *NONE         *SAME, *NONE, *CLKWD...
              + for more values

                                                                    Bottom
F3=Exit   F4=Prompt   F5=Refresh   F12=Cancel   F13=How to use this display
F24=More keys
```

Figure 18.21 Change profile (CHGPRF) screen showing changes in bold.

Verify that you have not made any keying mistakes. If you have made mistakes, use the Tab key to go to the erroneous field and make any necessary corrections. Once completed:

- *Press* **Enter** to transmit the new user profile changes to the server.

You should receive the following message:

```
User profile userPRF changed.
```

where userPRF is your User Profile name.

Note: The security officer set most of the attributes displayed in your user profile. Because of this, some of the values shown here may be different.

The changes you made to your user profile will not affect your current session. To get the server to recognize the user profile changes you made, you need to sign off the system and sign back on.

VERIFYING YOUR USER PROFILE CHANGES

There are individual commands that can be used to verify the changes that you have made to your user profile. We will not include them here, but there is one simple method that can be used to verify the changes that you have made. After you have signed back on, you can verify your profile changes by simply entering the `DSPUSRPRF` command in Figure 18.22 on any command line. Enter the following command to verify the changes to your profile:

- Enter **`DSPUSRPRF userPRF`** on the `Selection or command ===>` line.
- *Press* **Enter**.

```
MAIN                              OS/400 Main Menu
                                                          System:   BLUE400
 Select one of the following:

      1. User tasks
      2. Office tasks
      3. General system tasks
      4. Files, libraries, and folders
      5. Programming
      6. Communications
      7. Define or change the system
      8. Problem handling
      9. Display a menu
     10. Information Assistant options
     11. Client Access tasks

     90. Sign off

 Selection or command
 ===> dspusrprf userPRF

  F3=Exit   F4=Prompt   F9=Retrieve   F12=Cancel   F13=Information Assistant
  F23=Set initial menu
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.22 Entering the DSPUSRPRF command.

The Display User Profile information screens in Figure 18.23 appear. The Page Down and Page Up keys can be used to view and verify the profile attributes.

```
                        Display User Profile - Basic

 User profile . . . . . :   userPRF

 Previous sign-on . . . . . :   05/02/95  19:43:16
 Sign-on attempts not valid . . . . . :   0
 Status . . . . . :   *ENABLED
 Date password last changed . . . . . :   05/02/95
 Password expiration interval . . . . . :   *SYSVAL
 Set password to expired  . . . . . :   *NO
 User class . . . . . :   *PGMR
 Special authority  . . . . . :   *JOBCTL
                                   *SAVSYS
 Group profile  . . . . . :   *NONE
 Owner  . . . . . :   *USRPRF
 Group authority  . . . . . :   *NONE
 Group authority type . . . . . :   *PRIVATE
 Supplemental groups  . . . . . :   *NONE
 Assistance level . . . . . :   *SYSVAL
                                                                    More...
 Press Enter to continue.

 F3=Exit   F12=Cancel
 (C) COPYRIGHT IBM CORP. 1980, 1994.
```

```
                          Display User Profile - Basic

User profile . . . . . :   userPRF

Current library  . . . . . :   *CRTDFT
Initial program  . . . . . :   *NONE
  Library  . . . . . :
Initial menu . . . . . :   MAIN
  Library  . . . . . :     *LIBL
Limit capabilities . . . . . :   *NO
Text . . . . . :   Profile for userPRF

Display sign-on information  . . . . . :   *SYSVAL
Limit device sessions  . . . . . :   *SYSVAL
Keyboard buffering . . . . . :   *SYSVAL
Maximum storage allowed  . . . . . :   *NOMAX
  Storage used . . . . . :     8
Highest scheduling priority  . . . . . :   3

                                                                        More...
Press Enter to continue.

F3=Exit   F12=Cancel
```

```
                          Display User Profile - Basic

User profile . . . . . :   userPRF

Job description  . . . . . :   QDFTJOBD
  Library  . . . . . :     QGPL
Accounting code  . . . . . :
Message queue  . . . . . :   userMSGQ
  Library  . . . . . :     QUSRSYS
Message queue delivery . . . . . :   *NOTIFY
Message queue severity . . . . . :   00
Output queue . . . . . :   FACOUTQ
  Library  . . . . . :     QGPL
Printer device . . . . . :   *WRKSTN
Special environment  . . . . . :   *SYSVAL
Attention program  . . . . . :   *SYSVAL
  Library  . . . . . :
Sort sequence  . . . . . :   *SYSVAL
  Library  . . . . . :
                                                                        More...
Press Enter to continue.

F3=Exit   F12=Cancel
```

```
                          Display User Profile - Basic

User profile . . . . . :   userPRF

Language identifier  . . . . . :   *SYSVAL
Country identifier . . . . . :   *SYSVAL
Coded character set identifier . . . . . :   *SYSVAL
User options . . . . . :   *NONE
Object auditing value  . . . . . :   *NONE
Action auditing values . . . . . :   *NONE
User ID number . . . . . :   997
Group ID number  . . . . . :   *NONE









                                                                        More...
Press Enter to continue.

F3=Exit   F12=Cancel
```

Figure 18.23 Display User Profile screens.

- *Press* **F3** to return to the `OS/400 Main Menu`.

DISPLAY YOUR LIBRARY LIST TO CHECK THE CURRENT LIBRARY

There may be times when you will want to know which libraries are assigned to your profile or which library is the current library if you have changed it before. The Display Library List (`DSPLIBL`) command in Figure 18.24 is used to display a user's library list. To display your library list enter the following command on the command line of any menu screen:

- *Enter* **`DSPLIBL`** on the `Selection or command ===>` line.
- *Press* **Enter**.

The Display Library List screen, showing the libraries assigned to your user profile, is displayed as

```
                          Display Library List
                                                          System:   BLUE400

Type options, press Enter.
  5=Display objects in library

Opt  Library     Type      Text
 _   QSYS        SYS       System Library
 _   QSYS2       SYS       System Library for CPI's
 _   QHLPSYS     SYS
 _   QUSRSYS     SYS       SYSTEM LIBRARY FOR USERS
 _   userLIB     CUR       Personal Library for your-name
 _   QGPL        USR       General Purpose Library
 _   QTEMP       USR




                                                                      Bottom
F3=Exit   F12=Cancel   F17=Top   F18=Bottom
(C) COPYRIGHT IBM CORP. 1980, 1994.
```

Figure 18.24 Display Library List screen.

The purpose of the Display Library List screen is to provide information to the user. Changes or deletions cannot be made from display screens.

Once you have finished viewing the information:

Press **F3** (Exit).

SIGNING OFF

There are two ways to sign off of the system:

1. If you are at the `OS/400 Main Menu` screen shown below:
   a. *Enter* **90** on the `Selection or command ===>` line.
   b. *Press* Enter.
2. If you are at a screen that has a command line at the bottom, such as the `OS/400 Main Menu` screen in Figure 18.25:
   a. *Enter* **`SIGNOFF`** or **`signoff`** on the command line.
   b. *Press* **Enter**.

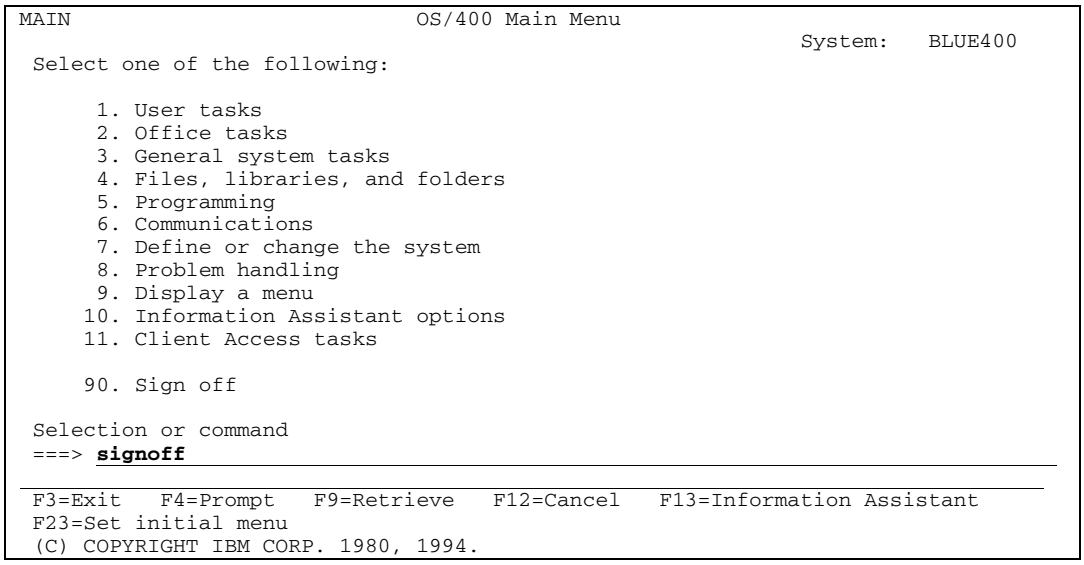

Figure 18.25 Signing off the system.