Chapter Two

LOGGING IN TO THE SYSTEM

Introduction

To access an OpenVMS system from a terminal or workstation you must go through a procedure known as ***logging in***, which allows the operating system to verify that you are an authorized user. The system does this by requiring you to enter identification information which is then compared with information stored in its security database. Once you are logged in to the OpenVMS environment, you can log in to the SuRPAS environment.

This chapter discusses the procedures for:

- Using Kea!Term to gain access to the Alphas
- Logging in and out of an OpenVMS system
- Accessing a remote OpenVMS system
- Viewing your OpenVMS User information
- Using MAGICwindows to create and maintain multiple OpenVMS sessions

Objectives

To access an OpenVMS system, a user should be able to:

- Use KEA!Term to gain access to an OpenVMS system
- Access a remote OpenVMS system
- Identify and use simple techniques to maintain user security
- Identify the basic characteristics of a user account
- Start MAGICwindows sessions
- Terminate an OpenVMS session

Using KEA!Term to Access the Alphas

Overview

The Compaq Alpha computers can be accessed directly through terminals connected to the Alpha computer, or indirectly through terminal servers, ethernet connections, and dial-up modems. All access to the PFPC Alphas is accomplished indirectly, using PC workstations. These workstations must emulate a Compaq terminal in order to be recognized by the Alphas. We use the KEA!Term product, a software terminal emulator, running on the PC workstations to accomplish this connection.

This section discusses:

- Starting a KEA! session
- The Keyboard layout
- Using the drop-down menus to configure your session
- Exiting KEA!

Starting a KEA! Session

The KEA! emulator lets you use your PC to emulate a Compaq VT terminal and communicate with the Compaq Alphas at PFPC. While maintaining your connection with the Alphas you can continue to use your PC to do other Windows work.

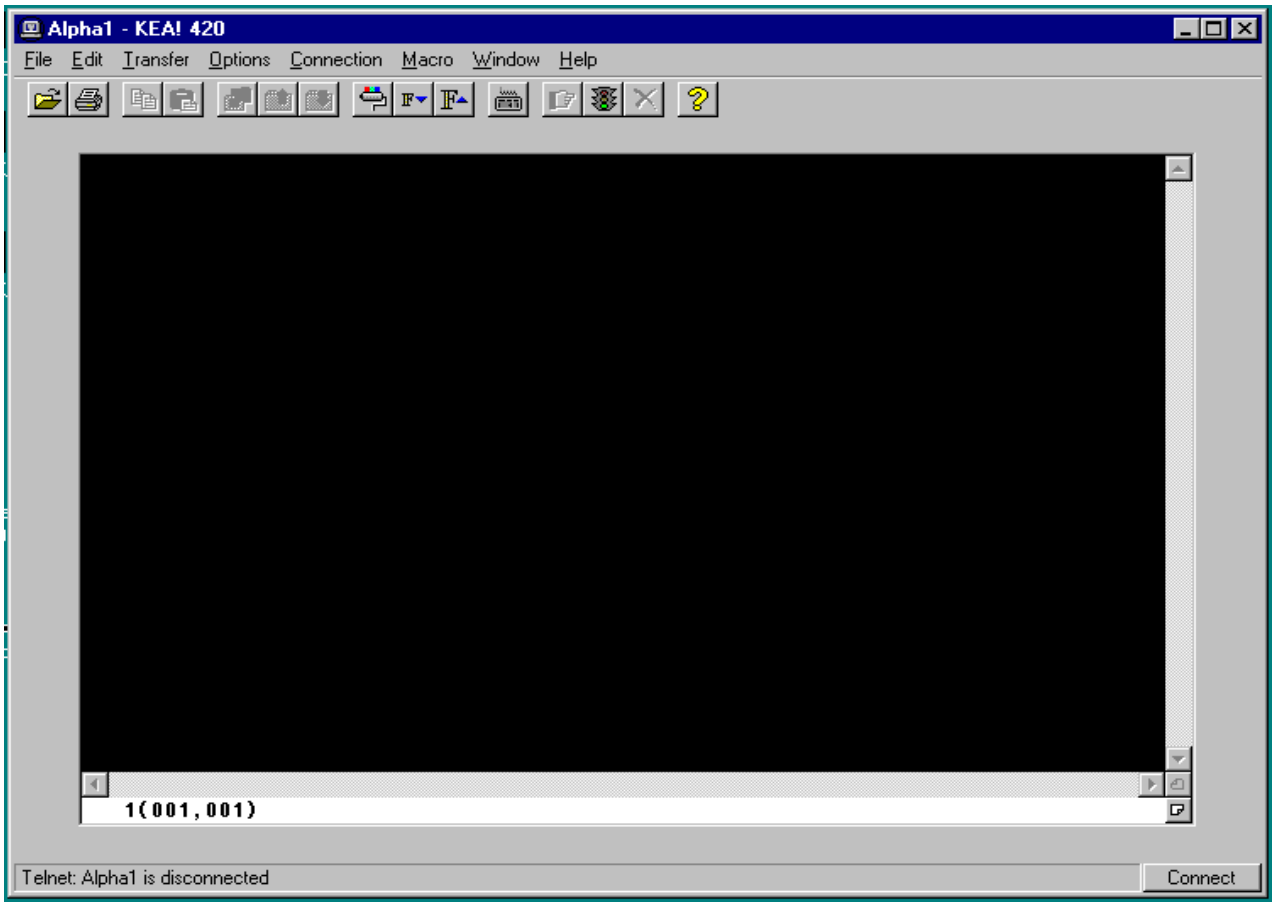
Where you are located and the type of connection you have with the PFPC Alphas at Berwyn will determine the type of connection you initiate, using KEA!. This connection may be over a local ethernet line, a wide area network line, or, if you are in a remote location, or working from home, a telephone line. The help desk will support you in setting up the correct connection to the Alphas using KEA!

Currently, there are two Alphas available for access through KEA!. They are referred to as ALPHA1 and ALPHA2. You will find on your PC desktop two KEA! icons, one for each Alpha. The icons are similar to the one found below.

To initiate a KEA session on your PC workstation, double-click on the icon for either Alpha1 or Alpha2. In most cases there is no difference between the two. They share most resources including printers, tape drives, and clustered hard drives. Once the application is started theKEA! session screen will open.

As with most Windows applications you can exit KEA! by selecting the exit option on the Files drop-down menu or you can click on the X in the upper right corner of the KEA! application window. For help on using KEA!, select the Help drop-down menu.

An example of a KEA! session screen can be found on the top of the next page.



Multiple KEA! Sessions

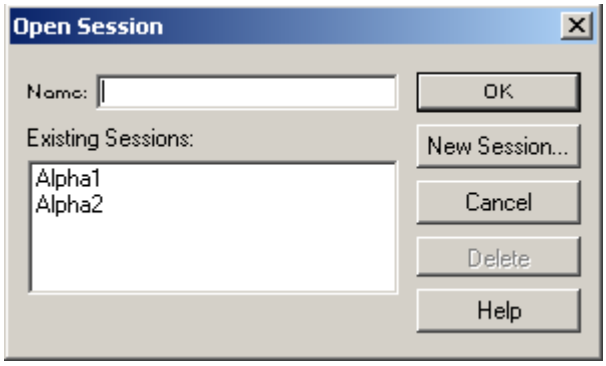
Each active connection between KEA! and an Alpha is called a display session. KEA! supports multiple display sessions simultaneously. Although it is not recommended, you could have one display session connected to Alpha1 and another connected to Alpha2. KEA! allows you to cut and paste information between display sessions and between KEA! and other PC applications.

As a note, there are more efficient methods to manage multiple Alpha sessions within the OpenVMS environment. This chapter will address such options at the DCL SET HOST command and the use of MAGICwindows as alternatives to multiple display sessions using KEA!.

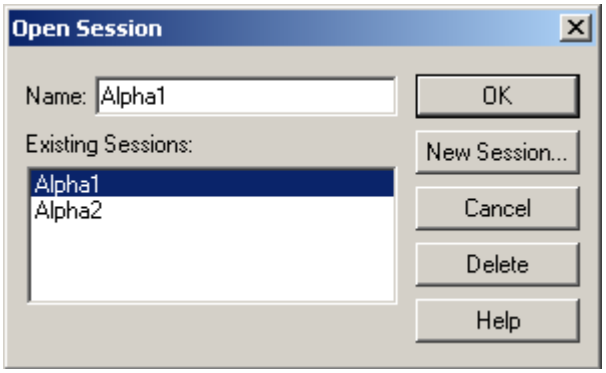
Starting Your Kea! Session

The first time you start KEA! the New KEA! Session dialog box will pop up and the available sessions will be displayed for you (see the Open Session Dialog Box, below). This will only occur if you don't have a template already created. The PFPC Help Desk can provide you with a template for both Alpha1 and Alpha2. If you find yourself without a pre-defined template, the following steps will guide you.

1. Select an Alpha by clicking on the selection in the Existing Sessions window. The selection will appear in the Name window.



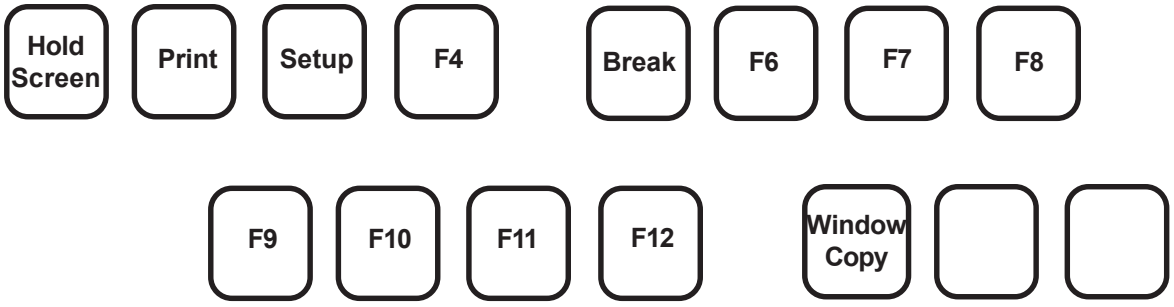
2. When you are satisfied with your selection press the OK button and you will be at the KEA! main screen and ready to log into the chosen Alpha.



The Keyboard Layout

The keyboard layout for KEA! gives you access to the standard Compaq terminal keys from your PC workstation keyboard. The mapping of these keys is found in the PC layouts that follow:

The first diagram shows the mapping of the 15 function keys on the top row of the PC keyboard.



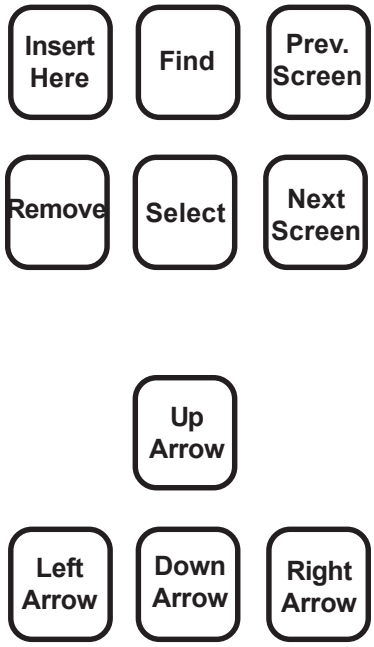
For the Print Function, use the Print command on the File drop-down menu.

For the Windows copy-to-clipboard function, press the Windows Copy key to copy the entire screen. Press the ALT/Windows Copy keys to copy the active window.

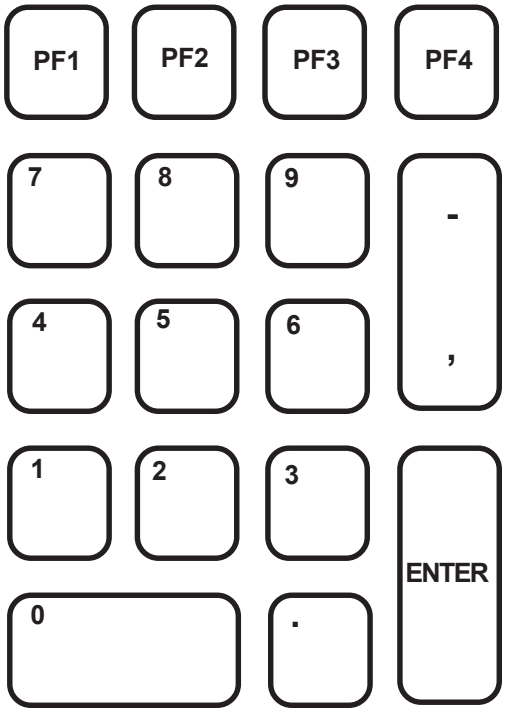
The F4 key can optionally be used to send an ESC (escape).

VT 420 Function	PC Keyboard
F11 ... F20	CTRL + F1 ... CTRL + F10
Help	CTRL + F5
Do	CTRL + F6
SHIFT + F6 ... SHIFT + F20	Add SHIFT to above combinations

This diagram shows the mapping of the center keys on the PC keyboard. These are located between the main typing keys and the keypad.



This diagram shows the mapping of the keypad keys on the PC keyboard.



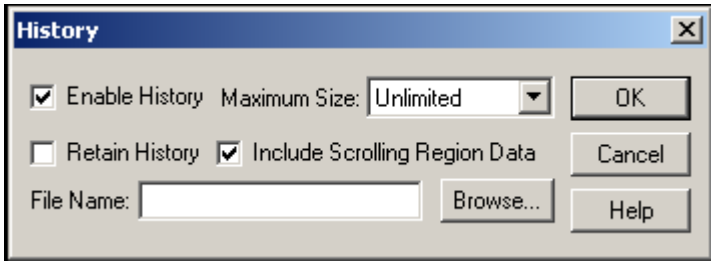
Using Drop-down Menus to Configure Your Session

Kea! session configuration is easy and straightforward. The drop-down menus provide the neccessy access and you can expand your use of the available features as you become more comfortable and knowledgeable with the Kea! application environment. This section covers only a few of the many features available.

Enabling the History Option

The fourth drop-down menu is the Connection menu. This menu is normally used for creating telephone or other communications connections between your PC and the remote system you are trying to reach. Our connections are local, across either a local area network or a wide area network. We only use this menu as a shortcut for enabling the history option. The Enable History option activates History and stores information no longer displayed on the screen in the History buffer. You can then scroll up, using the side bar arrow to see previously displayed information.

You can also turn on the history capability from the Options drop-down menu. This menu selection causes a dialog box to appear and more history options become available to you. The dialog box below shows the history options available.

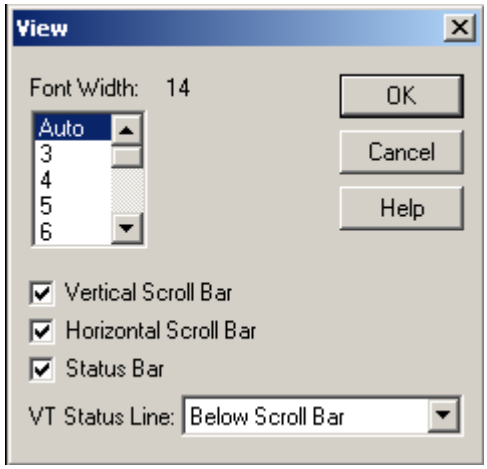


The Retain History feature allows you to store the history of your session in a file (defined in the File Name text box). This feature allows you to document important information about your session. If you are trying to capture the flow of a particular problem or a series of steps necessary to achieve a goal, the history capture can act as your memory of what occurred.

Once you have made your changes, press the OK button and then save your configuration changes using the Save selection on the File drop-down menu.

Changing Your Display Window Attributes

You can change a number of attributes that affect your display session window by selecting the View choice from the Options drop-down menu. This will open a dialog box similar to the one below.



Within this dialog box you can change the font size (or the Window width by selecting Auto), the existence of scroll bars and the status bar, and where the VT Status Line will be displayed (Hidden, Above the Scroll Bar, or Below the Scroll Bar). The VT Status Line is normally the 24th line (on the 23 line display) of the Compaq VT terminal.

Once you have made your changes, press the OK button and then save your configuration changes using the Save selection on the File drop-down menu.

Changing Color Attributes

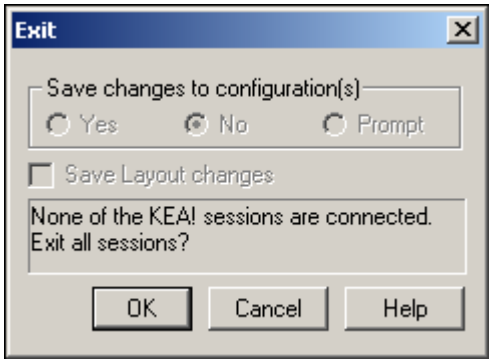
You can change the color attributes of your display window by selecting the Color choice from the Options drop-down menu. This dialog box allows you to change the foreground and background colors. It also allows you to map underlined, bold, inverse, and blinked characters to specific colors.

Once you have made your changes on the Color drop-down menu, press the OK button and then save your configuration changes using the Save selection on the File drop-down menu.

Exiting KEA!

A KEA! display session can be exited from the file menu (Close Session) or by clicking on the X in the upper right corner of the display window. To quit all open sessions, chose the Exit All choice from the File drop-down menu.

If you have made any changes to the configuration or settings, an Exit dialog box will appear. This dialog box, as seen below, will allow you to save those changes or discard them.



Upon exit, the display session window will disappear and you will be returned to the PC desktop.

Accessing an OpenVMS System

Overview

In order to interact with the OpenVMS operating system, you must log in to a user account. Logging in consists of getting the system's attention and identifying yourself as an authorized user. The way you log in and out of an OpenVMS system depends on how the system is set up at your site. This section provides a general description of procedures for accessing an OpenVMS system.

This section discusses:

- How the system validates a user
- Logging In
- Accessing systems through a terminal server
- Working with multiple sessions

How The System Validates a User

When an account is set up for a new user, the help desk must supply him with a user name and a password. The operating system will use these two pieces of information to identify people trying to gain access.

User Names

User Names consist of 1 to 12 characters.

- They can be entered in uppercase or lowercase. The system will translate them to all uppercase.

- They are often assigned to be the user's last name or the user's first initial and last name.

- No two users in the system have the same user name; user names must be unique in the system. If there were two Smiths in a system, the system could not tell which one was logging in. In this case, the help desk must make the names unique by modifying each one enough so the operating system can differentiate between the two. Very often this will be achieved by adding the initial of the first name. (John Smith's user name becomes JSMITH, and Mary Smith's user name becomes MSMITH.)

The Help Desk will assign you a three-character username when your OpenVMS account is created.

Passwords

Adequate length makes passwords more secure. They should consist of at least 6 to 10 characters (you can choose a password as long as 32 characters). They can be changed by the user at any time

Passwords are composed of the following legal characters:

- A through Z (uppercase or lowercase - the system will convert them to uppercase)
- Numerals 0 through 9
- Dollar Sign ($), Hyphen (-), and Underscore (_)

Passwords do not echo on the screen as they are being typed. They are protected, and can not be accidentally read or displayed on any terminal or anywhere on the screen.

Successful Validation

If the user name and password entered match those in the system user database record for that user (User Authorization File – UAF) :

1. **An interactive process is created for the user.**
   Process is the term that OpenVMS uses to describe the working environment that is created for a user when he logs in. All work that is done on an OpenVMS system is done within a process.

2. **An informational system message is displayed (if there is one).**
   The help desk can create a text file containing a message or messages that will be displayed at the user's terminal or workstation at each login. These are very useful when making announcements that all users need to see.

3. **The default DCL prompt, which is the dollar sign ($), is displayed.**
   At this time, control of communication is passed to the Command Language Interpreter (CLI). The CLI acts as the go-between between the user and the computer; it translates Digital Command Language (DCL) commands into a form that the computer can understand.

Validation Failure

If the user name and password do not match the UAF record, the user is denied access to the system and the following error message is displayed:

```
User authorization failure
```

The user can press the Return key to redisplay the Username prompt and try again. Several attempts should be made to log in before a problem is reported to the system manager. Errors in typing names or passwords are very common.

A PFPC an OpenVMS user account is locked after three login failures. The account will remain locked for a duration of 60 minutes.

Logging In

Follow these steps to log in to an Open VMS system.

1. Turn on your terminal or PC workstation.

2. Double-click on the Kea!Term icon on your desktop or in the Programs list of your Start Menu.

3. Press the Return key on the terminal keyboard or the Enter key on the PC workstation keyboard.

4. In response to the USERNAME: prompt, type your user name and then press either the Return key or the Enter key.

5. In response to the PASSWORD: prompt, type your password and then press either the Return key or the Enter key. The system does not display your password. Instead, it replaces each character typed with an asterisk (*) or a space. If your account is set up to require a secondary password, you will have to respond to a second PASSWORD: prompt.

```
Username:  9rb
Password:
   Welcome to OpenVMS Alpha Operating System version 7.2-1
      on Node MICKEY
       Last interactive login on Tuesday, 05-JUL-2001 12:42
       Last non-interactive login on Tuesday, 05-JUL-2001 11:07
$
```

Example 2-1 - Successful Login

```
Username:  9rb
Password:
User authorization Failure
```

Example 2-2 - Unsuccessful Login

Working With Multiple Sessions

Reasons For Multiple Sessions

A useful feature of terminal servers is that a user can establish more than one session to one or more services at the same time. It is helpful to be able to establish multiple terminal sessions in order to:

- Work on more than one computer system from the same terminal
- Perform more than one task at a time from a single terminal

You can have sessions with different services, and multiple sessions with one service.

Limitations To The Number of Sessions

The number of sessions that your port can support at one time is determined by the server manager, which is part of the terminal server software. If you try to exceed your session limit, the server displays an error message, and you must disconnect a session before you can create a new one.

In addition to this limit, you can only use one session at a time. If the task that you are doing in a session displays output to the terminal screen, that task will be stopped when you go to another session (until you reconnect to that session). As soon as you reconnect to that session, the display will continue.

To Establish Another Session

1. Return to local mode by pressing the Break key.

2. Then enter another CONNECT command with the name and work in multiple sessions with a terminal server.

Accessing a Remote OpenVMS System

Overview

Once you are logged in to an OpenVMS system, you can log in to another system that is linked to it through a computer network.

This section discusses how to establish sessions on remote systems.

Establishing Sessions on Remote Systems

SET HOST command

Use the SET HOST command to access a system that is available on the network, but not directly accessible through a terminal server.

- The SET HOST command connects your terminal (through the current host processor) to another processor, called the remote processor.
- The remote processor will prompt for user name and password.
  - You must have an account on that system.
  - Use the normal login procedure to log in to the remote processor.
- Both processors must be running the DECnet for OpenVMS software, which allows communication between systems on a network.
- The command **$ SET HOST 0** establishes another system session in addition to your current one.

The example on the next page illustrates how to establish a session on another system on the DECnet network.

```
$ SET HOST DONALD

   Welcome to OpenVMS Alpha Operating System Version 7.2-1

Username: SYSTEM
Password:

Welcome to OpenVMS Alpha Operating System Version 7.2-1 on node
DONALD
Last interactive login on Friday, 17-AUG-2001 09:44
Last non-interactive login on Friday, 17-AUG-2001 09:46
$
$ SHOW TIME
  17-AUG-2001 13:20:52

$  LOGOUT
   SYSTEM       logged out at 17-AUG-2001 13:21:06.11
%REM-S-END, control returned to node _MICKEY::
$
```

Example 2-11 - Establishing a Remote Session

Notes: Establishing a Remote Session

1. Issue the SET HOST command to log in to a remote system. The message displayed will vary from system to system.
2. Enter your user name and password for the remote system.
3. Issue DCL commands on the remote system.
4. Log out of the session on the remote system.
5. Control is returned to the original system.

Keeping a log of remote sessions

Use the SET HOST/LOG command to produce a log file of a remote terminal session. This command creates a file that echoes all commands and responses to commands issued, until the remote session is logged out. The log file created by this session is located in the user's default directory. If no name is attached to the qualifier, the file name defaults to SETHOST.LOG. The following example defines the output log file.

```
$ SET HOST/LOG=02MARCH_SESSION.LOG
```

A couple of reasons that a user might want to keep a log of remote sessions are: to use as an example when questioned by support staff, and to capture output from a program, command procedure, or command.

Using Simple User Security Techniques

Overview

You should protect your account against unauthorized access. You should change your password frequently and take precautions if you must leave a terminal that is logged in.

This section discusses:

- Changing a user password
- Locking a terminal session

Changing a User Password

Default System Password Activities

The OpenVMS operating system automatically screens user-generated passwords for acceptability. The system uses a couple of methods to decide if a selected password is allowable.

- The system keeps a list of previous passwords used by each user and checks that the new password is not part of this list. By default, the system keeps all users' old passwords for one year.

- A new password is automatically checked against a system dictionary to make sure the password is not a native language word.

Reasons For Changing a Password

There are several reasons that a user may have to change a password:

- Passwords should be changed periodically for security reasons. Every user has a responsibility to contribute to a secure computing environment. The simplest way that users can do this is to periodically change their passwords. This lessens the chance that an unauthorized person could obtain a password and use it to gain access to a system.
- The system manager may force periodic changes in passwords by placing an expiration date in the UAF. System managers may do this on a regular basis or occasionally when they receive information that would indicate a threat to security. **At PFPC passwords must be changed every thirty days and there is a history file kept of previously used passwords.**
- A newly created user account will usually have a pre-expired password, allowing the user to log in only once using that password.

When a system manager creates a new account, both the system manager and the user know its password. It is standard practice for the system manager to pre-expire the password to a new account to ensure that the user will immediately change his password.

Guidelines for selecting a password

Follow these guidelines when selecting a password:

- Make passwords at least eight characters long.
  It takes longer for word-generating programs to formulate all possible combinations of letters for long words than for short ones.

- Include both numbers and letters in the password.
  An 8-character password with both letters and numbers is much more secure then an 8-character password that contains only letters.

- Do not select a password from a dictionary or thesaurus. A password that has been selected this way will be easily detected by password hacking programs.

- Avoid names or words that are readily associated with you or your computer site. For example, do not use your pet's name or a product name.

- You can use multiple word phrases as a single word.
  - `this_is_a_multi_word_phrase`
  - `andsoisthis`

How to set a user password

Follow these steps to change your password:

1. Type the SET PASSWORD command at the $ prompt.
2. The system will prompt for the old password. When changing your password, user input is not echoed at the terminal.
3. The system will prompt for the new password. You must enter it twice. If the two entries do not match, the password will not change.

The following example shows the prompts displayed when you use the SET PASSWORD command.

```
$ SET PASSWORD
Old password:
New password:
Verification:
$
```

Example 2-12 - Using the SET PASSWORD command

Note that the user's responses do not echo.

The example on the next page shows five common errors that occur when changing a password.

```
1  $ SET PASSWORD
   Old password:
   New password:
   %SET-F-INVPWDLEN, password length must be between
   8 and 32 characters; password not changed
   $
2  $ SET PASSWORD
   Old password:
   New password:
   Verification:
   %SET-F-PWDNOTDIF, new password must be different
   from current password
   $
3  $ SET PASSWORD
   Old password:
   New password:
   Verification:
   %SYSTEM-F-PWDINHIS, password found in history
   list; please choose a new password
   $

4  $ SET PASSWORD
   Old password:
   New password:
   %SYSTEM-F-PWDINDIC, password found in system
   dictionary; please choose another string
   $
5  $ SET PASSWORD
   Old password:
   New password:
   Verification:
   %SET-I-PWDNOTVER, new password verification error;
   please try again
   Verification:
   $
```

Example 2-13 - Possible Errors in Changing a Password

Notes: Possible Errors in Changing a Password

1. The new password is shorter than the minimum length required by this site.
2. The new password is the same as the current password.
3. The password has been previously used.
4. The password tried is in the system dictionary.
5. The new password and the verification do not match.

Password Expiration

If a password is about to expire, users will see a display like the one shown below when they log in.

```
Welcome to OpenVMS Alpha Operating System Version E7.0

Username:  JDOE
Password:

Welcome to OpenVMS Alpha Operating System Version E7.0
on node TIDY

Last interactive login on Tuesday, 12-AUG-1995 09:07
Last non-interactive login on Tuesday, 12-AUG-1995 09:09
WARNING - Your password expires on Thursday, 14-AUG-1995
11:06
$
```

Example 2-14 - Password About To Expire

If the password is not changed by the expiration date displayed by the system, the user will be allowed to log in one more time. At that time, the user will see a message stating that the password has expired.

```
   Welcome to OpenVMS Alpha Operating System Version 7.2-1

Username: JDOE
Password:

 Welcome to OpenVMS Alpha Operating System Version 7.2-1 on node MICKEY
 Your password has expired; you must set a new password to log in

New password:
Verification:
$
```

Example 2-15 - Password Expired

If the user logs out without changing the password, access to the system will not be permitted until the system manager has reset or changed the password in the UAF.

Terminating an OpenVMS Session

Overview

When you finish using the system, you should log out. This prevents unauthorized users from accessing the system and your account, and makes resources available to the system.

This section discusses how to log out of the OpenVMS system.

Logging Out

Use the LOGOUT command to end your terminal session.

```
$ LOGOUT
  JDOE    logged out at 17-AUG-2001 11:10:32.12
```

Example 2-18 - The LOGOUT Command

If your site charges users for computer time, information displayed by the LOGOUT/FULL command may be helpful to you.

```
$ LOGOUT/FULL
  JDOE    logged out at 17-AUG-2001 11:10:32.12

Accounting information:
Buffered I/O count:     79    Peak working set size: 1560
Direct I/O count:       26    Peak page file size:   5229
Page faults:          5760    Mounted volumes:          0
Charged CPU time:  0 00:00:01.95
Elapsed time:      0 00:02:48.31
```

Example 2-19 - Displaying Accounting Information at Logout

The format for displaying CPU time and elapsed time is: D HH:MM:SS.CC (days, hours, minutes, seconds, hundredths of seconds).

In addition to logging out of your session on a computer system, you need to log out of the terminal server if you are connected to one.

In the following example, the user logs out of the terminal session on an OpenVMS system, and then logs out of the terminal server.

```
$ LOGOUT/FULL
  JDOE    logged out at 17-AUG-2001 11:11:37.17
Local -011- Session 1 disconnected from WALT

Local> LOGOUT
Local -020- Logged out port 16 on server Local
```

Example 2-20 - Logging Out Through a Terminal Server

The use of LO as a shortcut for LOGOUT is supported in the PFPC SYLOGIN.COM. Feel free to use it!

Creating MAGICwindows Sessions

Overview

Each time you log in to the OpenVMS operating system a session is created. When you need to have multiple activities running at the same time, it is necessary to have mutiple sessions open. There are a number of ways to create multiple sessions within the OpenVMS environment, but they are often tedious to create and manage. The MAGICwindows product allows you to build sessions without the management problems presented by the operating system.

This section discusses:

- Creating a MAGICwindows session
- Managing your MAGICwindows sessions
- Using the SHOW SYSTEM DCL command
- Deleting one or all of your MAGICwindows sessions

Creating a MAGICwindows Session

The MAGICwindows product is accessible from your OpenVMS environment using DCL commands. MAGICwindows allows you to create multiple interactive sessions, all running within your OpenVMS interactive session. These sessions allow you to run numerous applications, each executing in a separate session, similar to having multiple windows open in a Microsoft Windows or MAC OS environment.

Creating Magic

The MAGICwindows application is started by entering the DCL command:

```
$ MAGIC
```

A MAGICwindows dialogue box will appear on your screen and you can pick a session you wish to start. You can have up to nine sessions running at any one time. Note that the first six sessions are defined as DCL sessions and that the last three sessions are designated as FAL application sessions. The dialogue box looks similar to the following:

```
Licensee:                                                MAGICwindows V2.0-07
PFPC, INC. / BERWYN                                                6-JUL-2002
------------------------------------------------------------------------------

     1  DCL                                                        S Switch
     2  DCL                                                        R Resume
     3  DCL                                                        L Lock
     4  DCL                                                        P Print
     5  DCL                                                        H Help
     6  DCL
     7  FAL NEWS                                                   F Finish
     8  FAL Tracking System (FTK)
     9  UDMS Report Writer

Press option:
```

Example 2-21 - MAGICwindows Main Screen

At your workstation, select a session to create by entering a number between 1 and 6 at the prompt. When the new session is created enter the following commands at the DCL prompt:

```
$ SHOW DEFAULT
$ LNM
```

Managing Your MAGICwindows Sessions

Once you have chosen one of the 15 options available (nine session options and six function options) you will be maneuvering within the MAGICwindows application environment. You will not be returned to the OpenVMS DCL prompt until all of your sessions have been closed and you execute the Finish option.

Creating Process Windows

By entering a number from 1 to 9 at the **`Press option:`** prompt you are selecting a session to open. This allows you to execute applications and DCL commands concurrently in a separate window. When the window number is selected, your screen will clear and a new DCL prompt will appear in the upper left corner. Note that the prompt is preceeded by the number of the session. If you selected session window #1 at the Magic prompt, the new DCL prompt would be:

```
1$
```

Once a session is created you can move between a session window and the main menu by pressing the ***Tilde*** key (~), which is above the Tab key. You will then be returned to the the MAGICwindows main screen.

From your workstation DCL prompt, enter the [~] key to return to the MAGICwindows main screen.

Managing Multiple Sessions

The MAGICwindows main screen provides information about open sessions. If a session has been created there is a plus sign (**+**) in front of the session number. There is an "***r***" following the number of the last session that you visited indicating that you can ***resume*** executing within that process by selecting the resume option. There is an "***s***" following the number of the previous session that you visited indicating that you can ***switch*** to that session by selecting the switch option. The example at the top of the next page shows what the main screen would look like if three processes are open. Note that there are plus signs in front of the sessions numbered 1, 2, and 3. Also note that the last session visited was #3 since it has the "r" for resume following the session number. The process visited previous to #3 was #2. It has the "s" for switch following the session number.

```
Licensee:                                                MAGICwindows V2.0-07
PFPC, INC. / BERWYN                                                6-JUL-2002
_____________________________________________________________________________

   + 1  DCL                                                          S Switch
   + 2s DCL                                                          R Resume
   + 3r DCL                                                          L Lock
     4  DCL                                                          P Print
     5  DCL                                                          H Help
     6  DCL
     7  FAL NEWS                                                     F Finish
     8  FAL Tracking System (FTK)
     9  UDMS Report Writer

Press option:
```

Example 2-22 - Main Screen with Three Processes Open

You can open additional sessions by entering a new session number at the option prompt. You can move to an existing session by entering the number of that session or the appropriate “s” or “r” to switch to or resume a session.

Locking Your Workstation

You can lock your workstation if you need to leave the terminal while in the MAGICwindows environment, by selecting the “L” option at the prompt. The lock option locks your workstation and requires you to enter your OpenVMS password before the terminal will be unlocked. The example below shows the main screen when the lock option is requested.

```
Licensee:                                                MAGICwindows V2.0-07
PFPC, INC. / BERWYN                                                6-JUL-2002
_____________________________________________________________________________

   TERMINAL LOCKED.


   Enter password:
```

Example 2-23 - Locking Your Workstation While in MAGICwindows

Printing a Snapshot of Your Screen

You can print a snapshot of your screen while in the MAGICwindows environment, by selecting the “P” option at the prompt. The print option prompts you for the printer queue, then prints your screen to an OpenVMS printer of your choice. The example below shows the main screen when the print option is requested.

```
Licensee:                                                MAGICwindows V2.0-07
PFPC, INC. / BERWYN                                                6-JUL-2002
_____________________________________________________________________________

     1  DCL                                                        S Switch
     2  DCL                                                        R Resume
     3  DCL                                                        L Lock
     4  DCL                                                        P Print
     5  DCL                                                        H Help
     6  DCL
     7  FAL NEWS                                                   F Finish
     8  FAL Tracking System (FTK)
     9  UDMS Report Writer

Press option:  P

Enter print destination: /QUEUE=SYS$PRINT
```

Example 2-24 - Printing a Snapshot of Your Workstation While in MAGICwindows

MAGICwindows Help

This option provides OpenVMS help for MAGICwindows. Select the “H” option to access help. The example below shows the screen when help is selected.

```
 You are user 9RB at terminal TNA1323.

 HELP

   MAGICwindows (c) Copyright 1987-1992 by EMETEK, Los Angeles, California.

                 +---------------------------------------+
                 |          EMETEK HELP HOTLINE          |
                 |  For further assistance please call:  |
                 |             310/836-2784              |
                 +---------------------------------------+

    o Enter ? to list topics available
    o Enter * to display all the help available on a topic
    o Press Return or Exit (Ctrl Z) one or more times to exit from HELP
```

Example 2-25 - MAGICwindows Help Main Screen

Using the SHOW SYSTEM Command

The SHOW SYSTEM DCL command lists all processes known by the OpenVMS operating system at any time. You can use this command to view the sessions that have been created by MAGICwindows.

The SHOW SYSTEM command has the format:

```
$ SHOW SYSTEM
```

The list of processes is often long. The process that is assigned to you when you log in will contain your user name. When you are in the MAGICwindows application environment the list of processes will include an entry for your logged in process and one for each of your MAGICwindows sessions. These will be differentiated by the addition of an ***underscore*** (_) and the session number. If your username is 9RB, and you have created three sessions, you can expect to see entries that resemble the following:

```
9RB
9RB_1
9RB_2
9RB_3
```

Now that you have created a number of MAGICwindows sessions, issue the SHOW SYSTEM command at the DCL prompt and find the entries that are owned by your logged in process.

Deleting MAGICwindows Sessions

MAGICwindows sessions can be deleted from within the session. At the DCL prompt enter the LOGOUT command. This will end the session and return you to the MAGICwindows main screen.

You must delete all MAGICwindows sessions before you can exit MAGICwindows and return to your primary DCL prompt.

Use the Finish option in the main screen to exit MAGICwindows. When you select the "F" option at the prompt, your exit request will be processed. If you have open sessions, the main screen will look similar to the following example:

```
Licensee:                                                MAGICwindows V2.0-07
PFPC, INC. / BERWYN                                                6-JUL-2002
_____________________________________________________________________________

     1  DCL                                                        S Switch
     2  DCL                                                        R Resume
     3  DCL                                                        L Lock
     4  DCL                                                        P Print
     5  DCL                                                        H Help
     6  DCL
     7  FAL NEWS                                                   F Finish
     8  FAL Tracking System (FTK)
     9  UDMS Report Writer

Press option: F


? Please exit from all active programs first.  Press Return.
```

Example 2-26 - Exiting MAGICwindows With Sessions Open

A successful exit from MAGICwindows can be easily determined by noting if there is a session number in front of your DCL prompt. You can also use the SHOW SYSTEM DCL command to check for open MAGICwindows sessions.

Summary

Concepts

Gaining Access To An OpenVMS System

- When you log in to an OpenVMS system, you must enter a user name and a password.
- The steps for logging in are:
    1. Enter your username
    2. Enter your password

Accessing A Remote OpenVMS System

- Use the SET HOST command to log in to another system that is linked to yours through a network.
- You can keep a log of your remote session.

Using Simple User Security Techniques

- You should change your password frequently, and select a password that is not easy to guess.
- Use the SET PASSWORD command to change your password.
- When it is necessary to leave your terminal temporarily unattended, you can protect your session(s) from other users by issuing the LOCK command to the terminal server.

Terminating An OpenVMS Session

- Use the LOGOUT command to end a terminal session.

MAGICwindows Sessions

- Create multiple concurrent sessions without logging into OpenVMS numerous times, by using MAGICwindows.
- Use the SHOW SYSTEM command to check for open MAGICwindows sessions.

Commands

Accessing A Remote OpenVMS System

- **SET HOST *host_name***
  Establish a connection to any system available over Ethernet cables from the current system.
- **SET HOST/LOG *host_name***
  Establish a connection to any system available over Ethernet cables from the current system and create a log file of all commands and system responses during the remote session.

Using Simple User Security Techniques

- **SET PASSWORD**
  Change your password.
- **SET PASSWORD/GENERATE**
  Set a new password by using a system-generated character string.
- **LOCK**
  Safely leave your terminal unattended when you have at least one active session.

Terminating an OpenVMS Session

- **LOGOUT**
  End a terminal session.

MAGICwindows Sessions

- **MAGIC**
  Enters the MAGICwindows environment
- **Options**

1 - 9	Creates a MAGICwindows Session
S	Switch sessions
R	Resume your previous session
L	Lock the workstation
P	Print a screen snapshot
H	Get MAGICwindows Help
F	Finish - End your MAGICwindows sessions