



SINIX/windows *ONLINE Documentation*

SINIX V5.41 The FACE Interface

Edition July 1993

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1 Preface

FACE (**F**ramed **A**ccess **C**ommand **E**nvironment) is a menu-driven user interface for SINIX systems. This interface provides you with an electronic "office" where you can select commands to perform a wide range of frequently recurring tasks, such as organizing your filecabinet, collaborating with other users on projects, using installed programs and connected printers, and working on several different parallel tasks.

If the system administrator has given you the appropriate permissions, you can access the operating system on shell level or perform system administration functions.

Depending on which permissions you have been granted by your system administrator, the appearance of the *FACE* menu can vary; certain menu options may not then be available.

Three different user groups can therefore be distinguished:

- non-privileged *FACE* users
- non-privileged *FACE* users with SINIX shell authorization
- *FACE* users with system administrator permissions

1.1 Target group

This manual provides an introduction to using SINIX with the aid of *FACE*. It is thus aimed primarily at entry-level SINIX users with minimal operating system experience.

The intention therefore is to provide the basic knowledge which will enable you to rapidly achieve usable results when using your computer and performing tasks on it.

If you wish to work with *FACE*, you require only basic knowledge of your computer and the SINIX operating system. If you work with *FACE* as a SINIX interface, you need an elementary understanding of file cabinets and files. In both cases you should be familiar with the keyboard and screen of your terminal, know what files are and how to handle them, and be able to use one of the editors (e.g. *ced*, *vi* or *MAXed*).

Refer to the relevant sections of the "SINIX V5.41 User's Guide" as necessary.

1.2 Summary of contents

This "Preface" gives you an overview of the structure of the manual and the notational conventions used, and also an indication as to what prior knowledge is required to use *FACE*.

The chapter "Getting to know FACE" contains an introduction to your *FACE* main menu.

The following topics are described:

- logging in and out
- the elements of the *FACE* interface
- navigating between the frames of the interface
- navigating within menus, forms and text frames
- moving and reshaping frames
- operating the *FACE* office by means of function keys, the *Command Menu* with the available *FACE* commands, and the command line
- the new directory browser and the *Actions* menu within it
- getting help

The chapter "Working with files and file folders" provides information on the most important *FACE* commands for working with files and file folders (directories). It describes how to

- create files and file folders
- rename files and file folders
- copy and move files and file folders
- delete files and file folders
- undelete deleted files and file folders
- search for files and file folders
- control access to files
- compress or code files and return them to their original status
- set the preferences for the *FACE* main menu

The chapter "The FACE main menu" describes how to

- use the *Printer Operations* function and the *Print objects* command in the *Actions* menu for printing files on paper
- use the *Programs* menu with functions such as the *Spell Checker*
- manage your mail with *Mail Services*
- access the *Programs Administration* function
- access the SINIX operating system
- invoke executable files and SINIX shell scripts under *FACE*
- work with external storage media such as streamer tapes, floppy disks and CD-ROMs
- call up information about your system and the operating system
- use the *Calculator* function

The appendix gives you an overview of the function key assignments in the various *FACE* menus. A graphical representation of the hierarchical structure of the *FACE* menus provides you with a rapid orientation facility.

The reference section includes lists of all figures and tables. Cross-references to other documentation on the subject areas discussed are given in the individual sections. A bibliography with notes also appears in the reference section.

1.3 Changes since the last version of this manual

The directory browser is a new tool for executing functions which affect files and file folders, e.g. creating a new file or file folder, copying or deleting files and file folders, changing from one directory to another, etc. All functions affecting files and file folders are available via the *Actions* menu of the directory browser, and no longer via the command line. The new directory browser is clearer and easier to use than the original one.

You may, however, use the old *FACE* directory browser if you wish. Your system administrator can select whichever browser is required when setting up a *FACE* user. If you are using the old *FACE* directory browser, consult the previous version of this manual for the description of all functions affecting files and file folders.

The following menu items have been modified:

- For printing files you have in the *Printer Operations* menu a standard menu for all spoolers, except for SINIX SPOOL 4.0, which has its own interface. Here you can set your own or use the preset values for printing.
- In the *Mail Services* menu, you now have the option of displaying only mail selected according to topic or sender.
- In the *Floppy disk* menu you can select which drive you wish to use if your system has more than one. A new item in the *Floppy disk* menu is *Duplicate*, which you can use to make one-to-one copies of a floppy disk.
- In the *Streamer tape* menu you can select which drive you wish to use if your system has more than one.
- In the *Information* menu you are now able to request information about your hardware and the operating system version installed on your system.
- In the *Office of face* menu there is now a menu item called *Calculator* with which you can perform arithmetical calculations.

1.4 Validity of the manual

The present manual describes the functional status of SINIX systems with the SINIX V5.41 operating system. These systems will be released as of July 1993. Other implementations of *FACE* differ in their range of functions and should be operated as described in the previous edition of this manual (see the section "References"). If a particular function is not available, the corresponding menu item is not offered. You will also find specific notes in the manual.

1.5 Notational conventions

To make it easier for you to find certain sections, the section titles are repeated in the running headers.

The inner running header contains the title of the chapter, while the outer running header contains the title of the section.

To enable you to find information in this manual more easily, the following notational conventions appear in the text:

<i>italic</i>	Menu titles, menu items (options) and names in the <i>FACE</i> interface appear in italic.
fixed pitch	Messages which <i>FACE</i> displays in the message line appear in fixed pitch in the text, as do commands that you enter in the <i>FACE</i> command line and inputs that you make in forms. Commands that you enter in the SINIX shell appear on gray shading in fixed pitch. You conclude the input of a SINIX command by pressing [RETURN].
»	This symbol denotes actions you should perform, e.g. the inputs in examples.
UPPERCASE	Names of keys in the function key line appear in uppercase letters.
"Section xy"	References to sections of the manual that give further information on a current subject appear in double quotes and with a page reference.
"Manual"	A reference to a manual that is listed in the reference section at the end of the manual appears in double quotes.
Note:	This text identifies important information that you should consider.
Warning:	This text identifies notes that you must observe if you are to avoid possible loss of data.

Table 1: Notational conventions used in this manual

2 Getting to know FACE

This section contains an introduction to working with your *FACE* environment. It describes how you log in and log out, and what is understood by menus, forms and frames, and how you use them. It also describes how you move frames on the screen, how to operate *FACE* using the function keys (or alternate keystrokes), the Command Menu and the command line, how to use the directory browser and its *Actions* menu, and how to get help.

2.1 Invoking and exiting from FACE

This section contains information on how to start *FACE* and how to exit normally from *FACE*.

Invoking FACE

If your login name is set up as a *FACE* login name, *FACE* is invoked immediately when you log in to the system.

If you are in the SINIX shell after logging in to the system, use the following command to invoke *FACE*:

```
$ face
```

Remember to activate the command by pressing [RETURN].

The *FACE* interface appears shortly afterwards.

Exiting from FACE

It is best to exit from *FACE* in one of the following two ways:

First method: Using the *exit* command in the Command Menu

- » Press function key [F7] (CMD-MENU). This opens the Command Menu.
This key is unavailable to you when the command line is active. In this case you must first press [F6] (CANCEL) to exit the command line.
- » Position the cursor in the Command Menu at the *exit* command. You use the arrow keys [LEFT] [RIGHT] [UP] OR [DOWN] to position the cursor.
- » Press [RETURN] to activate the command.

Second method: Using the *Exit FACE* item in the *FACE* main menu

The menu bearing the name *FACE* in the black title line contains in its bottom line the *Exit FACE* command.

- » Select *Exit FACE* from the *FACE* main menu.
If the cursor, i.e. a highlighted line, is located in the *FACE* menu, you can use the arrow key [DOWN] to navigate to the bottom line of the menu, *Exit FACE*, and press [RETURN] to select this command.

If the cursor is located in another frame, you can use function keys [F4] OR [F5] to navigate from one frame to the next until it is located in the *FACE* menu.

Depending on which default you have defined in the *Office of face* menu in the *Office Functions* form (see section "Filling in the Office Functions form") under *Confirm at Exit*, a new frame is opened. In this frame you are requested to confirm that you really do wish to exit from *FACE*. If you have set the entry to *no*, *FACE* is terminated without this confirmation query.

- » Confirm by pressing [F3] (CONT).

If, however, you do not wish to exit from *FACE*, press [F6] (CANCEL) to keep the *FACE* interface open.

If you are working under a *FACE* login name, i.e. *FACE* was invoked automatically when you logged in, you will be automatically logged off from the system on exiting from *FACE*. If you invoked *FACE* in the SINIX shell, you are returned to the SINIX shell on exiting from *FACE*.

2.2 The FACE screen

This section explains the logical structure of the *FACE* screen and how to work with frames, forms and menus.

2.2.1 Functional areas of the FACE screen

The following five different functional areas are displayed on the *FACE* screen:

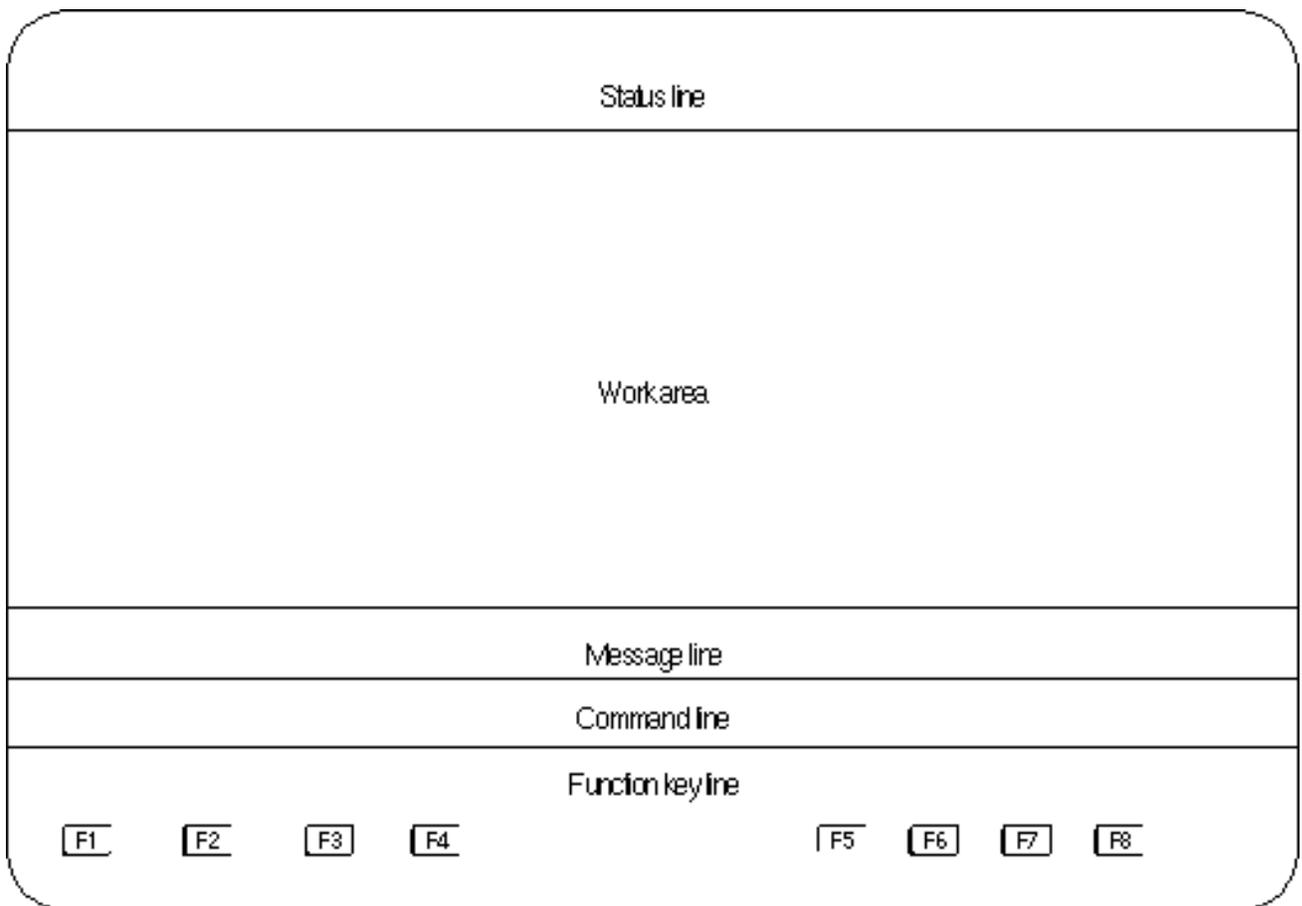


Figure 1: Functional areas of the FACE screen

Status line

The status line displays information about the status of the system. The word *FACE* and the date always appear in the center of this line. If your login name is connected to the electronic mail system, the word `MAIL` is displayed at the far left of this line as soon as mail arrives for you to read. When *FACE* is busy, the word `working ...` will be displayed at the far right on this line. While this message remains displayed, *FACE* cannot process any inputs. You cannot do anything else with the *FACE* main menu until *FACE* removes the message.

Work area

The work area is the central portion of your screen. It is here that the menus, forms and file folders (directories) you will work with are displayed in frames. The first example of a frame

that you will encounter is the *FACE* menu, which is displayed in the work area immediately after you log into *FACE* (see section "The FACE main menu after you log in"). A frame or part of a frame may be temporarily overwritten by another frame if several are open at the same time.

Message line

The first line beneath the work area is the message line. It is where feedback and error messages are displayed during or after the function you are performing. It is also where you are prompted for more information when more information is required by the function you are performing.

Immediately after you log in, the following message is displayed in the message line:

Move to an item with arrow keys and press the ENTER key to select the item.

Command line

The second line beneath the work area is the command line. To be able to enter a command in the command line, press either the key combination [CTRL] {j} or the key sequence [CTRL] {f} [c]. You can then enter commands via the keyboard or by selecting from the command menu. Inputs in the command line must always be activated by pressing [RETURN]. The Command Menu is described in the section "Function keys and commands", subsection "The Command Menu".

Function key assignments

The current key assignments for the function keys are displayed in the last line of your *FACE* screen. They are shown in the figure "Functional areas of the FACE screen" as [F1] through [F8].

The function key assignments change according to which frame (menu or form) you are currently using. The last line of the screen tells you for each new operating step which functions you can currently activate through the individual function keys.

If the keyboard of your terminal does not have any function keys or if no keys with corresponding assignments are available, you can access the desired functions using key combinations.

The use of function keys is described in detail in the section "Function keys and key combinations". An overview of all possible function key assignments may be found in the appendix to this manual under the heading "All function key commands".

2.2.2 Frames

Within the *FACE* work area, smaller areas delimited by means of a border are set up for different purposes. These areas are known as frames.

The upper edge of a frame is a title bar in which the number and name of the frame are displayed. The frames are numbered in the order in which they are opened.

You can open, move, reshape and close frames as required. Frames display their contents either in full or in part. If the entire contents cannot be displayed in the open frame, a scroll arrow appears in the black scroll bar in the righthand frame border. This icon indicates that you can scroll the contents of the frame.

You can only ever access the contents of one frame. If you wish to access another frame, you must navigate to the frame concerned. How this is done is explained in the section "Changing frames".

There are different types of frames: menus, forms, text frames and dialog frames. You will

learn how to use these in the following.

Menus

Menus contain lists which in turn contain either commands for the operation of *FACE*, or files and file folders (directories). A command contained in the menu is referred to as an option or menu item.

One of the items in a menu is optically highlighted. You can move this highlighting using the cursor. The cursor can be shifted from one menu item to the next by using the arrow keys [UP] or [DOWN]. The currently highlighted menu item, i.e. the one on which the cursor is positioned, can be activated by pressing [RETURN]. You will learn more about using menus in the section "How to use a menu".

Forms

Forms, or masks, contain one or more fields for the input of data. These fields can be filled via the keyboard. Default values are provided for some fields. You can use these default values by pressing the function key CHOICES. You will learn more about using forms in the section "How to use a form".

Text frames

Text frames are used for displaying help texts or system information. You can use the *Show files* and *Show folders* commands from the *Actions* menu to display the contents of a file or file folder in a text frame. The file contents cannot be modified by this means.

Dialog frames

FACE uses a dialog frame to query whether you wish to continue or cancel an action you have begun. You can use the keys assigned the appropriate functions: [F3] CONT and [F6] CANCEL. The text content of a dialog frame cannot be modified.

2.2.3 The FACE main menu after you log in

When you have logged in, the *FACE* screen appears, containing the first frame, the *FACE* main menu. This frame is always open on the *FACE* screen. The *FACE* main menu is always assigned the number 1 (this number is located above the menu before the title *FACE*). The *FACE* menu will appear on your screen as shown in Figure 2.



Move to an item with arrow keys and press ENTER to select the item.



Figure 2: The FACE main menu after logging in

The *FACE* menu is an important part of the *FACE* screen. From this frame you can access the entire *FACE* system. The following overview describes briefly the functions of the menu items contained in the *FACE* menu.

Office of *face*

A new menu titled *Office of face* opens in the work area, containing further *FACE* functions. By using this menu, you can access the files and file folders belonging to your own login name, the login names of other users and the commands for managing files and folders. This menu also offers the *Calculator* option, with which you can perform arithmetical calculations.

For example, if your login name is *matthew*, this menu item will read: *Office of matthew*. Since we obviously do not know your login name, the item will be called *Office of face* throughout this manual.

Printer Operations

You can use the *Printer Operations* menu to customize the print command to suit your needs, to request information about the printers connected to your system and any print jobs waiting in the queue, and to delete or modify a current print job.

Programs

The *Programs* menu item presents a menu listing all the programs installed on your system that you may access. If there are no programs installed for use in *FACE*, this item will not appear in your *FACE* menu.

Information

The *Information* menu item provides the following information about your system:

- List of users entered and currently logged into the system

- Free/occupied space on the hard disk
- Active processes
- Software products installed on the system
- The operating system version installed on your system and the hardware you are using

Mail Services

The *Mail Services* menu item offers the following functions:

- Send mail and read new mail
- Redirect mail to other recipients
- Add individual recipients and recipient groups to mailgroups determined by you
- Display mailgroups
- Define which mail is to be displayed: mail on a specific topic or mail from a specific sender

Floppy disk

The *Floppy disk* menu item offers the following functions:

- Select a disk drive if your system has more than one available
- Format floppy disks
- Define the output format of archive files
- Write or append files to a floppy disk
- Duplicate a floppy disk
- Display the contents of a floppy disk
- Read files from a floppy disk

If no floppy disk drive is installed in your system to which you can perform write operations, this item will not appear in your *FACE* menu.

Streamer tape

The *Streamer tape* menu item offers the following functions:

- Select a streamer drive if your system has more than one available
- Define the output format of archive files
- Write files to a streamer tape
- Display the contents of a streamer tape
- Read files from a streamer tape

CD-ROM

The *CD-ROM* menu item offers the following functions:

- Reserve a CD-ROM drive
- Mount a CD-ROM file tree in your own file system in order to use files contained in it
- Unmount a CD-ROM file tree
- Free a CD-ROM drive
- Display CD-ROM information

If no CD-ROM is installed in your system, this menu item will not be available to you.

System Administration

If you are a system administrator, you can perform the following tasks:

- Administer *FACE*
- Add logins
- Install programs
- Add printers or modems
- Display user information
- Display system configuration

- Perform various administration tasks

If you have not been given system administration privileges, this item will not appear in your *FACE* menu. If you do have the *System Administration* entry but no *root* permission (UID = 0), then the password for the *root* ID will be requested before the system administration menus are opened.

SINIX System

This item allows you to access the SINIX shell level directly. If you do not have access permission for the shell level, this item will not appear in your *FACE* menu.

Exit FACE

You exit *FACE* by selecting this menu item and then confirming the operation by using the function key SAVE.

The menu functions summarized above are described in detail in the chapter "The FACE main menu".

Other items not described here may also appear in your *FACE* main menu. These are foreign applications having an FMLI interface that have been added to the system by your system administrator. The following are examples of such items:

- Network operations
- Development systems
- Applications

2.2.4 How to use a menu

A menu offers a list of items for selection. You can activate these menu items and so, for example, start a command or open a file.

You will therefore principally perform two actions in a menu: position the cursor on the desired item and activate an option.

Control of the cursor (navigation) is summarized in a table below. You will then learn in two exercises how to select and activate menu items.

Navigating in a menu

There are several methods used to represent the cursor in *FACE*, i.e. to show the item that you are currently positioned on in a menu. This is dependent on the type of your terminal. An icon is displayed to the left of the menu item. On some terminals the icon indicating position is a right angle bracket (>), on others it is an underscore (_), and others a right arrow (→). On still other terminals it may be something different.

A second method for showing the current menu item can only be activated if your terminal supports reverse video. Reverse video is a feature that enables two-color display terminals to display parts of the screen in the opposite combination of colors. For example, instead of white characters on a black background, parts of the screen are displayed as black characters on a white background. If your terminal has this feature, the item on which you are currently positioned is highlighted in reverse video.

Cursor control

The same keys are used for moving around (navigating) in all *FACE* frames. The cursor movements and the requisite keystrokes are summarized in the following table:

Function	Key	Alternative key

		combination
Moves the cursor down one item. From the last item it wraps to the first item in the next column.	[DOWN]	[CTRL] [d]
Moves the cursor up one item. From the first item it wraps to the last item in the previous column.	[UP]	[CTRL] [u]
Single-column menu: Moves the cursor down one item. Multicolumn menu: Moves the cursor right one item.	[RIGHT]	[CTRL] {r}
Single-column menu: Moves the cursor up one item. Multicolumn menu: Moves the cursor left one item.	[LEFT]	[CTRL] {l}
Single-column menu: Moves the cursor down one item. Multicolumn menu: Moves the cursor right one item.	-	[CTRL] [n]
Single-column menu: Moves the cursor up one item. Multicolumn menu: Moves the cursor left one item.	-	[CTRL] [p]
Moves the cursor to the first visible item	-	[CTRL] {f} [b]
Moves the cursor to the last item of the first column or page of the menu.	-	[CTRL] {f} [e]

Table 2: Navigating in menus

If a menu contains too many items to display at once, you can scroll the frame contents. A scrollable frame is identified by icons (arrows) in the scroll bar on the righthand border of the menu; these scroll arrows indicate which way the frame contents may be scrolled. If a menu has scrollable contents, certain other keys will also work. The additional key combinations are listed in the following table:

Function	Key combination
Moves the cursor to the first item on the next page. The page is displayed if there is another full page of menu items.	[CTRL] [w]
Moves the cursor to the first item on the previous page. The page is displayed if there is a previous full page of menu items.	[CTRL] [v]
Moves the cursor to the first item in the	[CTRL] [b]

menu.	
Moves the cursor to the last item in the menu.	[CTRL] [e]
Rolls the contents of the menu down one line.	[CTRL] {f} [d]
Rolls the contents of the menu up one line.	[CTRL] {f} [u]

Table 3: Navigating in scrollable menus

Selecting an item from a menu

The following brief exercises show you two methods of selecting an item from a menu. Try both, then you can continue to use whichever one you like best throughout these exercises and whenever you are working in *FACE*.

A menu item can be selected simply by navigating to it and pressing [RETURN].

- » Continue to press [DOWN] (OR [CTRL] [d]), or [UP], until the cursor is positioned on the *Office of face* menu item.
- » Press [RETURN] to select (open) this item. The *Office of face* menu frame is now displayed on the screen. This frame has the number 2.
- » Continue to press [DOWN] (OR [CTRL] [d]) until the cursor is positioned on the *Filecabinet* item; then press [RETURN] to select (open) it.
Once *Filecabinet* has been selected, the *Directory browser* frame will appear in the work area of the frame with a list of all file folders contained in your highest folder, the home directory.
- » Press [F6] (CANCEL) to close the *Directory browser* frame.

Typing the first letters of the menu item

The second way to select an item from a menu is by simply typing its name or an unambiguous abbreviation of that name.

- » If you wish to position the cursor on the *Other Users* item, type the letter o. The case of letters is ignored. Notice that the cursor moves immediately to the *Other Users* item.
- » Position the cursor on the *Wastebasket* item by using the cursor keys or typing the letter w. The cursor moves to *Wastebasket*.

When you make a typing error or change your mind about what you want to select, you must press the backspace key [BACKSPACE] to clear out the letters you have typed so far.

Function key assignment in menus

A further means of working in menus is offered by the commands that are assigned to the function keys; you can activate such commands with a simple keystroke. The function key assignments are explained in this section.

The function keys in the bottom line of the *FACE* screen represent the eight function keys [F1] through [F8] (soft keys 1 through 8) on the keyboard.

If the active frame is a menu, the following assignments are displayed for these function keys:

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
HELP	blank	SAVE	PREV-F RM	NEXT-FR M	CANCEL	CMD-MEN U	bla nk

Table 4: Function key assignment in menus

The possible assignments for the function keys are listed in the section "Function keys and key combinations".

Warning:

If some of the specified function keys are not present on your keyboard (or do not work as indicated), you can use alternate keystrokes. Refer here also to the section "Function keys and key combinations".

2.2.5 Changing frames

So far you have learned about two methods that allow you to navigate between frames:

- Selecting (opening) a menu item will always cause navigation to the frame that is opened by this item - even if this frame is already open.
- Canceling (closing) a frame by pressing [F6] will cause navigation to the previously active frame.

If you wish to continue working in a different frame, it is useful to do so without previously closing all opened frames.

To practice several ways of navigating between frames without closing the currently active one, you will need to have several frames open on your *FACE* screen.

Opening frames

The following instructions will open the *Office of face*, */home/face* and *Preferences* frames.

- » Select *Office of face* from the *FACE* menu.
- » Select *Filecabinet:* from the *Office of face* menu.
- » Press [F4] (PREV-FRM) to return to *Office of face*.
- » Select *Preferences* from the *Office of face* menu.

Navigating between frames

This method of navigating between frames makes use of the frame numbers that appear to the left of the title of each open frame. Notice that each open frame has a unique number, starting with the *FACE* frame, which is numbered 1.

- » Press [CTRL] {j} to access the command line.
- » Type the number 2 and press [RETURN] to navigate back to frame 2, the *Office of face* menu.
- » Select *Other Users*.

The *Other Users* menu opens, and you can look through the list of other users, perhaps to find a login name you need.

- » When you are finished with the *Other Users* menu, press [CTRL] {j}, type *cancel* in the command line and then press [RETURN] to close the menu.

The cursor is now in the previously active frame, the *Office of face* menu.

Navigating between frames with function keys

Most frames that appear on the *FACE* screen have PREV-FRM and NEXT-FRM assigned to function keys [F4] and [F5]. These function keys cause the cursor to jump from frame to frame. The frame jumped to becomes active, and the frame jumped from becomes inactive.

- » Make the *Office of face* menu the active frame.

- » Press [F4] (PREV-FRM) to jump to the frame that was active before you opened the *Office of face* menu.
The cursor jumps back, for example, to the *FACE* menu if that was where you started *Office of face* from.
- » Press [F5] (NEXT-FRM) to jump back to the *Office of face* menu.
- » Press [F6] (CANCEL) to close the *Office of face* menu.
The *FACE* menu should again be the active frame.

Navigating between frames with the frm-mgmt command

Although the *Command Menu* is explained fully in section "The Command Menu", one of the commands available from it is explained here because it enables you to navigate between frames without closing the currently active frame.

You can select items from the *Command Menu* as you can in any other menu. In the *Command Menu*, however, the items are neither menus nor forms, but *FACE* commands. You can use the *frm-mgmt* command to navigate between frames.

- » Select *Office of face* from the *FACE* menu.
- » Press [F7] (CMD-MENU) to access the *Command Menu*.
- » Select *frm-mgmt* from the *Command Menu*.
The *Command Menu* disappears and the *Frame Management* menu appears, containing the *list* item.
- » Select *list*.
The *Open Frames* menu appears, listing all open frames on your screen.
- » Select *Office of face*.
The *Open Frames* menu disappears and the *Office of face* frame becomes active.
- » Press [F6] (CANCEL) to close the *Office of face* frame.
The *FACE* menu is again the active frame.

2.2.6 How to use a form

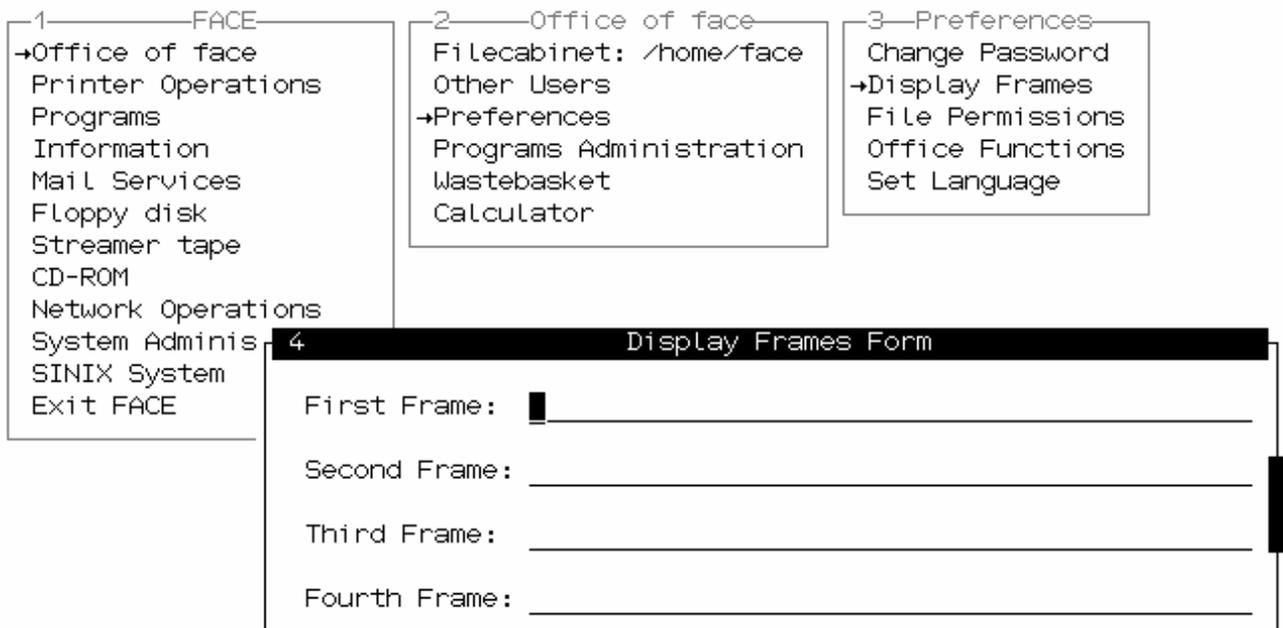
A second type of frame in *FACE* is a form. A form looks like a fill-in-the-blanks questionnaire.

Opening the 'Display Frames' form

The *Display Frames* item in the *Preferences* menu contains forms like the one shown below:

- » Activate the *Office of face* item in the *FACE* menu.
- » Activate the *Preferences* item in the opened *Office of face* menu.
- » Activate the *Display Frames* item in the opened *Preferences* menu.

Your screen should now look like this:



Press CHOICES to select a frame, then press SAVE when you complete the form.

Figure 3: The 'Display Frames Form'

The information you enter in the fields of a form is used by *FACE* to change the way your *FACE* screen looks, for example, or to change what a *FACE* command does.

Forms often appear with default values already in most of the fields. This default value is automatically assigned to the field by *FACE* and will remain the value for that field unless you change it.

You will see that the function key assignments at the bottom of the screen have changed. Navigation in a form and function key assignments are explained in the following sections.

» Close the form by pressing [F6] (CANCEL).

Function key assignment in forms

The function key assignments in forms are different from those in menus. Notice that since there are only eight functions available in forms, there is no need for *FACE* to reserve [F8] to act as a toggle between levels, as happens in menus.

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
HELP	CHOICE S	SAVE	PREV-FR M	NEXT-FR M	CANCEL	CMD-MEN U	RESET

Table 5: Function key assignment in forms

The three function keys that are different from those in menus are [F2] (CHOICES), [F3] (SAVE) and [F8] (RESET).

The CHOICES function key will display the valid choices for the current field.

» If three entries or fewer are available, you enter the possible values directly in the field one after the other by pressing [F2] (CHOICES).

- » If you can select from more than three choices, a corresponding list is displayed in a frame. You can have the desired entry from this list entered in the field by pressing the ENTER key [F3]. If no predefined selection is provided for the field, the message `No choices available` is displayed in the message line.

The [F8] (RESET) function key restores the value of the current field to whatever it was before you changed it. [F8] (RESET) is not available in all forms.

The [F3] (SAVE) function key saves the values you have entered in all the fields and closes the form.

Navigating in a form

The following table shows how to use the function keys when editing in a form.

Function	Key	Alternative key combination
Moves the cursor down to the next field. From the last field it wraps around to the top field.	[DOWN]	[CTRL] [d]
Moves the cursor up to the previous field. From the first field it wraps around to the bottom field.	[UP]	[CTRL] [u]
Moves cursor one character to right.	[RIGHT]	[CTRL] {r}
Moves cursor one character to left.	[LEFT]	[CTRL] {l}
Moves the cursor to the next field in the form. From the bottom field it wraps around to the top field.	?????	[CTRL] {i}
Moves the cursor to the previous field in the form. From the top field it wraps around to the bottom field.	?????	[CTRL] {t} OF [F5] [TAB RIGHT]
Moves the cursor to the first character of the current field.	[HOME] OF [Home]	[CTRL] {f} [b]
Moves the cursor to the last character of the current field.	-	[CTRL] {f} [e]
Deletes character to left of cursor.	[BACKS PACE]	[CTRL] [h]
Replaces the character at the current cursor position with a space.	[Space]	-
Deletes the character at the current cursor position.	-	[CTRL] [x]
Deletes the remainder of the line.	-	[CTRL] {f} [y]
Deletes the line.	-	[CTRL] [k] OF

		[CTRL] [y]
Resets a field to its initial value.	-	[CTRL] {f} {r}

Table 6: Navigating in forms

Warning:

When entering a new value in a field, avoid inserting a space at the beginning of the input. This will produce an error message and lead to unpredictable results.

Filling in the Office Functions form

The following exercise shows you how to call the *Office Functions Form* and change field values in it.

- » Select *Preferences* from the *Office of face* menu. The *Preferences* menu, containing five items, appears. Select *Office Functions* from the *Preferences* menu. Your screen should now look like this:

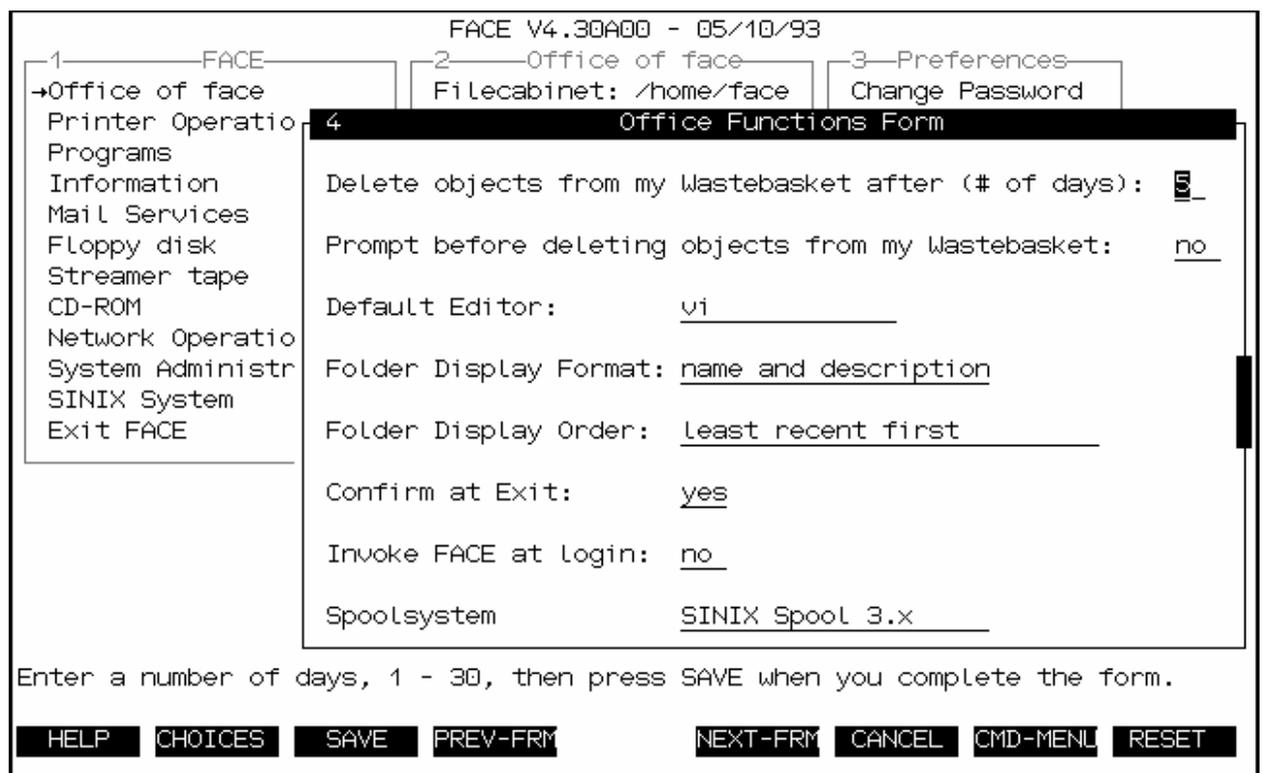


Figure 4: The 'Office Functions Form'

The *Office Functions Form* appears on the screen; the cursor is positioned on the first field *Delete objects in my Wastebasket after (# of days)*. The default value for this field is *1*. Notice that the function key labels at the bottom of the screen have changed. The message line above tells you the valid entries you can make in this field.

- » Type *32* in this field as an example and press [F3] (ENTER). Notice that *Input is not valid* is displayed on the message line, and that the cursor did not move to the next field. If *FACE* determines that the new value you are trying to enter in a field is not valid (here *32*), you will not be able to leave the field until it contains an

- acceptable one.
- » Press [F8] (RESET) to restore the previous value for this field. Pressing [F8] only affects the current field.
 - » Navigate to the field *Prompt before deleting ...* (it displays the default value *yes*) and press [F2] (CHOICES). The value in the field will change to *no*. Press CHOICES again, and the value of the field changes back to *yes*.
 - » Press [UP] twice to navigate to the *Folder Display Format:* field. It displays the default value *name and description*.
 - » Press [F2] (CHOICES) again. This time a *Choices* menu appears on the screen. When there are fewer than four choices, pressing [F2] (CHOICES) repeatedly will toggle through them in the field itself. When there are four or more valid choices, these are shown in a *Choices* menu.
- A *Choices* menu is different from other menus in two ways. Firstly, only two function keys are available: ENTER and CANCEL. Secondly, selecting an item from a *Choices* menu does not open anything. The item you select is simply entered into the form field.
- » Press the function key [F3] (ENTER) to select any item from the *Choices* menu. The *Choices* menu disappears and the selected item is entered in the *Folder Display Format:* field.
 - » Press [F6] (CANCEL), which cancels any changes you may have made in all fields in the *Office Functions* form and closes it, returning you to the *Preferences* menu.
 - » Press [CTRL] {j} to access the command line, type *cancel* and then press [RETURN]. This closes the *Preferences* menu and puts you back in the *Office of face* menu. Typing *cancel* on the command line has the same effect as pressing [F6] (CANCEL). In fact, when you press [F6] (CANCEL), *FACE* simply executes the *cancel* command for you.
 - » Press [F6] (CANCEL) to close the *Office of face* frame and return to the *FACE* menu.

2.2.7 Managing the appearance of your FACE screen

Each time you open a frame, *FACE* automatically determines its shape and location on the screen. *FACE* positions frames so that they do not overlap unless it is necessary. *FACE* also sizes each frame to fit the files and file folders listed.

The *frm-mgmt* command enables you to change the position and shape of an open frame where this is a menu or a text frame. While you cannot reshape a form, you can change its position.

As described in the last section, the *frm-mgmt* command can also be used to list all open frames as a menu and activate any one of them.

If you change or move a menu or text frame, the change remains in effect as long as the frame is open. Once you close a changed frame or exit from *FACE*, the change is lost. *FACE* will automatically reshape and reposition the frame the next time it is opened. It will try to return the frame to its original position provided this has not been occupied in the meantime by other frames.

Moving a frame

Some users want frames in specific locations, such as the */home/face* frame at top right of the work area. Others may want frames to be narrow so that more frames can be seen at one time.

In the following exercise, you will use *frm-mgmt* from the *Command Menu* to move the */home/face* frame to a new location in your work area.

- » Select *Office of face* from the *FACE* menu.
- » Select *Filecabinet* from the *Office of face* menu.
The frame to be moved, here the */home/face* frame, must be the active frame *before* you execute *frm-mgmt*.
- » Press [F7] (CMD-MENU) to display the *Command Menu*.
- » Select *frm-mgmt*.
- » Select *move* from the *Frame Management* menu.
Notice that the cursor is on the top left corner of the */home/face* frame, the other three corners are blinking, and the message line instructs you to position the corner where you want it to be moved.
- » Use the arrow keys to position the top left corner marker by moving the cursor to the desired position; then press [RETURN].
The */home/face* frame has been relocated on your screen.
- » Navigate back to the *Office of face* menu, without closing the */home/face* frame, by pressing [F4] (PREV-FRM).
Notice that the */home/face* frame stays in its new location.
- » Navigate back to the */home/face* frame with [F5] (NEXT-FRM), then press [F6] (CANCEL) to close it.
- » Select *Filecabinet* from the *Office of face* menu again.
The */home/face* frame is back in its original location. All changes you have made are lost on closing the frame.

Reshaping a frame

In this exercise you will learn how to change the size of the */home/face* frame using the *frm-mgmt* command.

- » Make the */home/face* frame the current menu by pressing [F4] (PREV-FRM) or [F5] (NEXT-FRM).
- » Press [CTRL] {j} to access the command line, then type *frm-mgmt* and press [RETURN].
- » Select *reshape* from the *Frame Management* menu.
- » When the prompt instructs you to position the top left corner, use the arrow keys to position it where you want it. Then press [RETURN].
- » As soon as the prompt instructs you to position the bottom right corner, use the arrow keys to determine the size of the frame. Then press [F3] (ENTER).

Remember, after you close a frame you have reshaped, or exit from *FACE*, this frame will revert to the location *FACE* assigns to it automatically. If the frame contains a list, e.g. a folder menu, any command that causes the menu to be updated, such as creating a new file, will also cause it to revert to its original shape and location.

Note:

Only menus and text frames can be reshaped. Forms cannot be reshaped.

2.3 Function keys and commands

The facilities for operating *FACE* are summarized in the following sections. You are already familiar with most of them from the preceding exercises. These facilities are described below so that you can practise using them again in examples, and also refer to them subsequently with regard to individual keys or commands.

2.3.1 Function keys and key combinations

The function keys on the bottom line of the *FACE* screen represent the eight function keys [F1] through [F8] on the keyboard.

The standard function key assignments for the commonest operating steps are summarized in the following sections. In certain instances the function key assignments may differ from the standard cases quoted below. You will already be familiar with various points below from preceding chapters. The main commands are then described in alphabetical order. You will find a description of all commands in the appendix of this manual under the heading "All function key commands".

Function key assignment in menus

If the active frame is a menu, the following assignments are displayed for these function keys:

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
HELP	blank	SAVE	PREV-FR M	NEXT-FR M	CANCEL	CMD-MENU	bl

Table 7: Function key assignment in menus

Function key assignment in menus with multiple selection options

If the active frame is a menu in which you can mark options, the following assignments are displayed for these function keys:

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
HELP	CHOICES	SAVE	PREV-FR M	NEXT-FR M	CANCEL	CMD-MENU	bl

Table 8: Function key assignment in menus with selection options

Function key assignment in the directory browser

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
HELP	QUICK-C H	OPEN_F OL	PREV-FR M	NEXT-FR M	CANCEL	CMD-MENU	C S

Table 9: Function key assignment in the directory browser

Function key assignment in the file frame

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]

HELP	MARK	ENTER	PREV-FR M	NEXT-FR M	CANCEL	CMD-MENU	bl
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Table 10: Function key assignment in the file frame

Function key assignment in forms

Keys [F2] and [F8] have a different assignment for forms than they do in menus. Notice that key [F8] (RESET) is sometimes blank.

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
HELP	CHOICE S	SAVE	PREV-FR M	NEXT-FR M	CANCEL	CMD-MEN U	RES

Table 11: Function key assignment in forms

Function key assignment in text frames

If the contents of a text file are displayed in the frame where the cursor is currently located, the following assignments are displayed for these function keys:

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
HELP	PREVPAG E	NEXTPAG E	PREV-FR M	NEXT-FR M	CANCEL	CMD-MEN U	bl

Table 12: Function key assignment in text frames

Function key assignment for active command line

If you are currently working in the command line, only the following two function keys are available to you:

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
HELP	blank	blank	blank	blank	CANCEL	blank	bl

Table 13: Function key assignment for active command line

Function key assignment for active CHOICES menu

If you have opened a menu by pressing [F2] (CHOICES), in which the possible standard values for the field of a form are available for selection, two function keys are assigned:

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
blank	blank	ENTER	blank	blank	CANCEL	blank	bl

Table 14: Function key assignment for active CHOICES menu

Function key assignment for open help texts

If you have opened a frame containing help texts on your *FACE* screen, the following function keys are available to you:

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
blank	PREVPA	NEXTPA	PREV-FR	NEXT-FR	CANCEL	CMD-ME	CO

GE GE M M NU TS

Table 15: Function key assignment for open help texts

Function key assignment in a dialog frame

When you initiate an action, a dialog frame is opened, asking whether you wish to cancel or continue the action.

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
blank	blank	CONT	PREV-F RM	NEXT-FRM	CANCEL	CMD-MENU	blank

Table 16: Function key assignment in a dialog frame

The main function key commands

The mode of operation of the functions that you can activate with the function keys is described in the following.

CANCEL

Closes the active frame without any change to its contents. No function is activated.

CHG-KEYS

Switches between the two alternative function key assignments.

CHOICES

Displays standard values for a field of a form. If there are three such values or fewer, each keystroke inserts the next one of the possible values directly into the field of the form. If there are more than three possible values, a menu is opened containing these values. Pressing `[RETURN]` causes a value from the menu to be inserted into the field of the form.

CMD-MENU

Displays the multicolumn menu, allowing you to activate the commands contained in it by pressing `[RETURN]`. Refer to the section "The Command Menu" for details.

CONTENTS

When a frame containing a help text is open, this command can display a table of contents of the subjects on which help texts are available.

DELETE

Deletes all data objects which have been entered in the appropriate form.

ENTER

Activates a command or the values specified in a form. Has the same effect as `[RETURN]`.

HELP Opens a help text in a new frame for the frame on which the cursor is currently located. In forms the help relates to the currently active frame

NEXTPAGE

Rolls forward one page in a frame displaying text.

NEXT-FRM

Makes the frame with the next higher number the current frame.

OPEN_FOL

Opens the folder on which the cursor is positioned in the directory browser.

PREVPAGE

Rolls back one page in a frame displaying text.

PREV-FRM

Makes the frame with the next lower number the current frame.

RESET

Restores the value to the field of a form that the field had when the form was last opened.

SAVECloses the active frame. The values used in that frame are interpreted as the current values.

QUICK-CH

Changes more quickly from one folder to another in the directory browser.

Alternate key combinations

If your keyboard does not have some of the specified keys (or they do not work as specified), then you can instead use certain alternate keystrokes.

If the function keys [F1] through [F8] are not available on the keyboard of your terminal, or if these function keys do not work, you can substitute their function as follows:

- » Press [CTRL] and {f} together.
- » Now press a key on the alphanumeric keypad corresponding to the number of the function key. You may also press the corresponding key on the numeric keypad, after first ensuring that the [Num L] key is activated.

If you wish to replace the key [F1] for example, press [CTRL] and keeping this key depressed also press the {f} key. Then release both keys and press the [1] key on the alphanumeric keypad.

The following table shows combinations of two or three keys that have the same function as the specified function key.

CONTROL sequence	Alternative key
[CTRL] [a]	-
[CTRL] [b]	-
[CTRL] [d]	-
[CTRL] [e]	-
[CTRL] [h]	[BACKSPACE] ¹
[CTRL] {i}	-
[CTRL] {j}	[CTRL] {f} [c]
[CTRL] [k]	-
[CTRL] {l}	-
[CTRL] [m]	-
[CTRL] [n]	-
[CTRL] [o]	-
[CTRL] [p]	-
[CTRL] {r}	-
[CTRL] {t}	-
[CTRL] [u]	-

[CTRL] [v]	-
[CTRL] [w]	-
[CTRL] [x]	-
[CTRL] [y]	-
[CTRL] {f} [1]	[F1]
[CTRL] {f} [2]	[F2]
[CTRL] {f} [3]	[F3]
[CTRL] {f} [4]	[F4]
[CTRL] {f} [5]	[F5]
[CTRL] {f} [6]	[F6]
[CTRL] {f} [7]	[F7]
[CTRL] {f} [8]	[F8]
[CTRL] {f} [b]	-
[CTRL] {f} [c]	[CTRL] {j}
[CTRL] {f} [d]	-
[CTRL] {f} {r}	-
[CTRL] {f} [u]	-
[CTRL] {f} [y]	-

Table 17: Function keys and their alternate keystrokes

¹⁾ If the [BACKSPACE] key does not work like [CTRL] [h], a different code may have been set using the SINIX 'stty' command (see the manual "Commands Volume 2"). Ask your system administrator.

2.3.2 The Command Menu

The *Command Menu*, shown in Figure 5, is a complete list of *FACE* commands for you to select from. It is displayed by pressing [F7] (CMD-MENU).

Alternatively, all these commands can also be executed directly from the command line by pressing [CTRL] and {j}, typing the command name, and then pressing [RETURN].

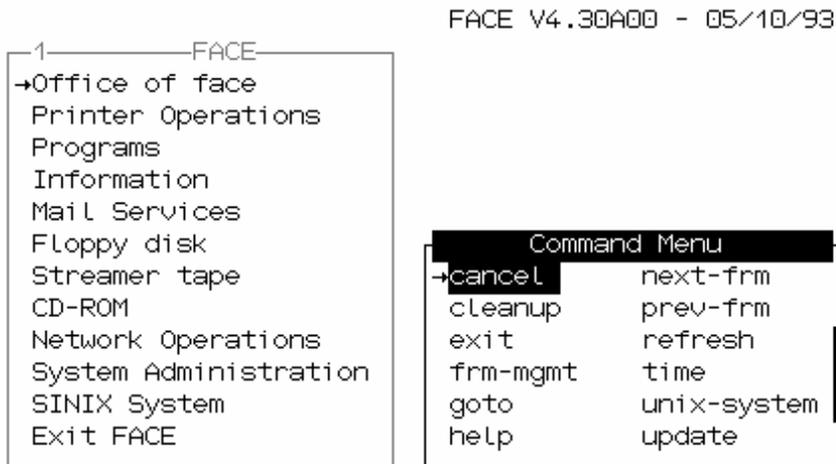


Figure 5: The 'Command Menu'

A brief description of each command follows in the next section. Detailed on-screen help is also available for each command by pressing [F1]. Access to that help is covered in detail in the section "Getting help".

The following example shows you how to proceed if you wish to work with the *Command Menu* and the options it contains.

Using commands from the Command Menu

In this exercise, you will use only a few of the commands contained in the *Command Menu*:

- » Select *Office of face* from the *FACE* menu.
- » Press [F7] (CMD-MENU) to open the *Command Menu*.
- » Navigate to the relevant command and press [F3] (ENTER). If the command you select requires more information from you, you will be prompted for it.
- » Navigate to the *time* command and press [CTRL] {j}. Notice that it now appears on the command line, after the --> prompt. The *Command Menu* disappears, and the function key labels now display only CANCEL and HELP. These are the function keys that apply to the command line.
- » Press [F6] (CANCEL). The command line prompt disappears because CANCEL currently applies only to the command line. In effect, you have canceled the *time* command, and the frame that was most recently active, the *Office of face* menu, becomes active again.
- » Press [F7] (CMD-MENU) again, navigate to *cancel* and press [CTRL] {j} to access the command line.
The *Command Menu* closes, and *cancel* is displayed on the command line.
- » Press [RETURN]. By pressing it you have run the *cancel* command. This time, *cancel*

operated only on the currently active frame, the *Office of face* menu. The *Office of face* menu disappears and the *FACE* menu becomes the active frame.

The commands from the Command Menu

As described in the previous exercise, you can activate a command from the *Command Menu* by pressing [RETURN]. The command then always relates to the currently active frame. Commands for editing files and folders can be found in the *Actions* menu, which appears when you access your files and folders via the *Office of face* option.

cancel

Closes the active frame without any change to its contents. No function is activated.

cleanup

Closes the frames that are not already open as standard at the beginning of your *FACE* session.

exit

Terminates the *FACE* session if you confirm this action. You close the frame containing the confirmation query by pressing [F3]. This finally terminates the *FACE* session.

frm-mgmt

Allows a frame to be moved or reshaped. This command opens a menu with the items *list*, *move* and *reshape*.

list	You receive a list of the currently open frames.
move	You define a new frame position by navigating to the new position of the top left corner and then pressing [RETURN].
reshape	You define a new frame shape by navigating first to the new position of the top left corner and pressing [RETURN]. Then you navigate to the position of the bottom right corner and confirm by pressing [RETURN].

Table 18: Options for the 'frm-mgmt' frame

goto Navigates to the frame whose number or path name you have specified.

help Opens a help text in a new frame for the element or the frame of the *FACE* main menu on which the cursor is currently located; cf. function key HELP ("HELP").

next-frm

Advances the cursor to the next frame.

prev-frm

Returns the cursor to the previous frame.

refresh

Refreshes the screen. This may be necessary if the screen structure is disrupted by messages from executing programs or by faults.

time Displays the date and time on the message line.

unix-system

Displays the SINIX shell in place of the *FACE* office. This option is only available to you if you have shell authorization.

update

Displays changes in a frame that were made after the frame was opened.

Note:

The *Command Menu* no longer contains all the functions for editing files and folders. You can access these functions via the *Actions* menu (see the section "Actions menu").

2.3.3 Command line

The command line is where you use the commands listed in the *Command Menu*. You can take these commands directly from the *Command Menu* or type them on the keyboard. Refer to the example "Using commands from the Command Menu".

To be able to enter something in the command line via the keyboard, you must first press either [CTRL] {j} or [CTRL] {f} [c]. Then you can type commands on the keyboard.

If you wish to take a command from the *Command Menu*, you must open the *Command Menu* by pressing [F7] (CMD-MENU). Navigate to the command you wish to have in the command line.

Then press [CTRL] {j} or [CTRL] {f} [c]. This places the command in the command line and activates the command line.

With the aid of the command line you can also navigate to a frame by entering the number of the frame. This places the cursor in that frame. The number of a frame appears in the frame's title bar before the frame name.

2.4 Actions menu

Functions for editing files and file folders can be accessed from the *Actions* menu in the directory browser. The directory browser allows you fast access to your files and folders and enables your to switch between your folders and between files within a folder. To access the *Actions* menu you must open a file frame in the directory browser as follows:

» Change to the *Office of face* menu and click on *Filecabinet: /home/face*.

Once you have selected *Filecabinet: /home/face* and have reached the directory browser, your screen should look like this:

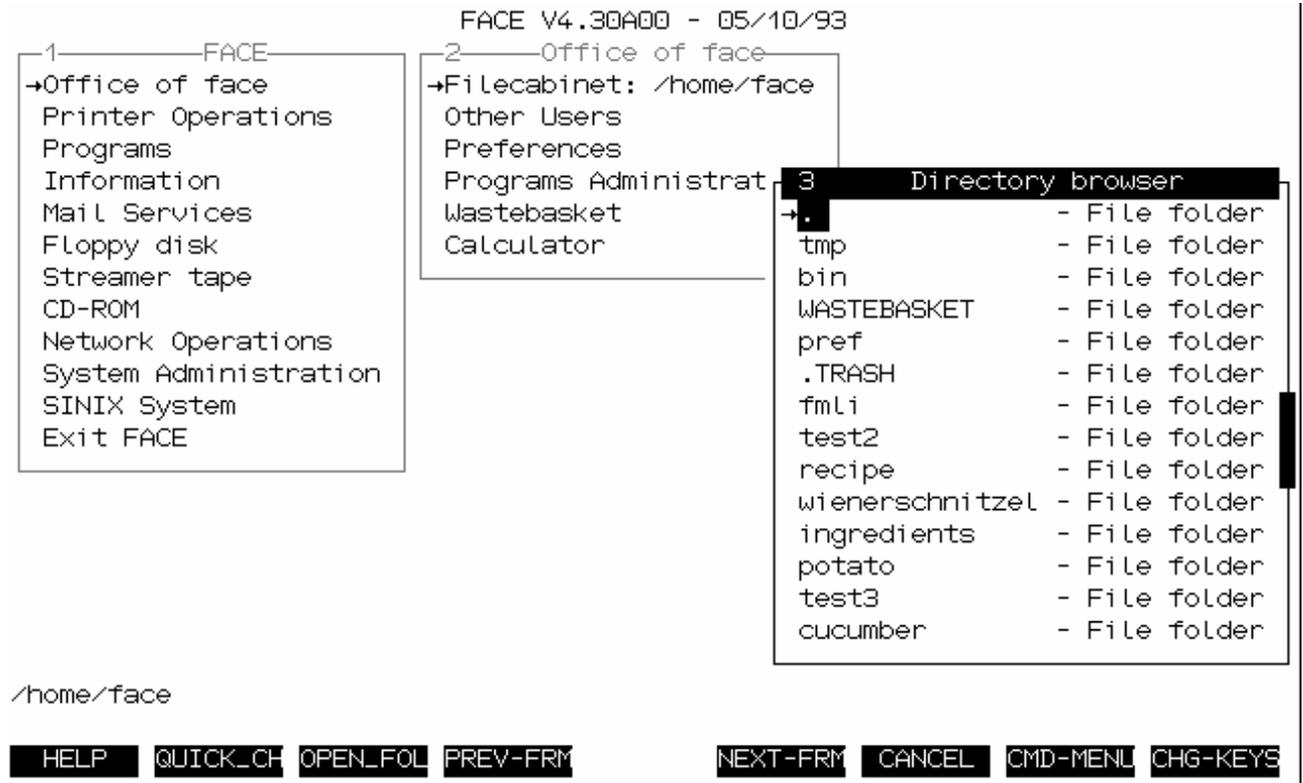


Figure 6: Directory browser

You are now in your home directory, the highest folder. The *Directory browser* displays all folders within this one. The current folder is always indicated by a dot (.) before the first character in the *Directory browser* frame. If you are not in the highest folder, you can change to a higher folder than the current one by clicking on the double dot item (..), which represents the next folder up.

The scrollbar at the right-hand side of the *Directory browser* frame indicates that not all the entries fit on one page of a frame, and you can scroll up and down the display using the [PAGE UP] and [PAGE DOWN] keys.

» Press the [F3] key to open the current folder.

A file frame appears with the absolute path name of the current folder as its title and containing a list of all the files and folders in this folder. As in the *Directory browser* frame, the current folder is represented by a dot (.), and if there is a folder above this one it is represented by a double dot (..). If you are in your home directory you cannot change to higher directory.

If you wish to open a different folder from the current one, use the cursor keys to move to

A copy of each marked file or folder is stored in a target folder which you have specified beforehand.

Create objects

A frame appears in which you must specify the name of the new data object. You will then be asked whether the new data object is to be a file or a folder.

Delete objects

The selected file objects are deleted or sent to the wastebasket.

Execute

The commands contained in an executable file (program, shell script, etc.) are executed.

Find A form opens in which you can enter either name, object type, owner or age of data object as the search criterion. The system searches for data objects in the current folder and in all folders within it.

Move objects

The selected data objects are moved to a target folder which you have specified beforehand (i.e. their path name is changed).

Open files

The preset editor (ced, vi, MAXed) is called and the selected file is loaded for editing.

Print objects

In a new frame, you can choose whether to send a data object (file or folder) directly to the printer for printing, or whether to set specific parameters for the printout beforehand.

Redescribe files

The description of an object is rewritten or modified. This means that default description generated when the data object is created is overwritten.

Rename objects

You can enter a new name for the selected file or folder in a form.

Send mail

The *Send mail* form is opened. The selected files can be sent to another user on your system or to a remote system in your network.

Show files

The contents of the selected file are displayed in a file frame, but you cannot edit the file.

Show folders

The contents of the selected folder are displayed in a file frame.

Uncompress files

Files which have been processed with *Compress files* so that they require less space on the hard disk are returned to their original status.

Undelete objects

Previously deleted files or folders are fetched from the wastebasket and restored to a target folder you have specified.

Uudecode files

Files which have been encoded using *Uuencode files* are returned to their original status.

Uuencode files

Binary files (e.g. C program files) which are to be sent via the mail function must first be encoded using *Uuencode*.

2.5 Getting help

The Help Facility is a built-in user's aid, offering help on all aspects of using *FACE*. The following section discusses how to get help on specific commands, menus, and form fields.

2.5.1 Getting help on FACE commands, menus, and form fields

Help on the currently active command, menu, or form field is easy to get because the *help* command is always assigned to function key [F1] if there is help available.

- When the active frame is the *Command Menu*, pressing [F1] (HELP) presents you with a frame of information about how to use the command on which you are currently positioned.
- When you are on the command line, pressing [F1] (HELP) presents you with a menu of the commands, and gives help on the command you select.

The next exercise shows how to get specific help on a *FACE* command. Later, you can try the same procedure and navigation techniques when you want help on a specific menu or form field. The Help Facility gives you help on the currently active *FACE* command or frame.

- » Navigate to the *Office of face* frame by pressing [F4] (PREV-FRM) or [F5] (NEXT-FRM).
- » Press [F7] (CMD-MENU) to open the *Command Menu*. The cursor is positioned on the command *cancel*.
- » Press [F1] (HELP) to open the Help Facility frame for the *cancel* command. The *Command Menu* disappears and a new frame, *Help on cancel*, displays a brief summary of what the *cancel* command does, and how to use it. Function keys [F2] and [F3], now labeled PREVPAGE and NEXTPAGE, show you the previous and next frame of text in a help frame. The scroll bar in the right border of the frame shows the ↓ icon, indicating that there are more pages of text following this one.
- » Press [F3] (NEXTPAGE). A second icon, (^), appears in the scroll bar, and means that there is a page preceding this one that you can access with [F2] (PREVPAGE).
- » Press [F6] (CANCEL) to close the *Help on cancel* frame.

2.5.2 Getting help on FACE in general

Help on *FACE* in general is available in the form of help texts. However, certain preparatory steps are required to get this information. You must first open any *Help* frame (by pressing [F1] HELP) on the screen. Then you can get a table of contents of the available help texts by pressing [F8] (CONTENTS); this function key is only available when a *Help* frame is open. The *Overview of Contents* menu offers access to a general description of *FACE*. The following exercise explains how you then obtain further information and help texts. You can begin this exercise from whichever frame you wish.

- » Press [F1] (HELP) and a frame of information will display help text about the currently active frame. Notice that the screen label for function key [F8] now reads CONTENTS.
- » Press [F8] (CONTENTS). Function key [F8] always displays this screen label when you are in a *HELP* frame. The *Overview of Contents* menu that appears now lists topics on the mechanics of using *FACE*.
- » Select *Frames and Function Keys* from the *Overview of Contents* menu. A frame titled *Help Facility: Frames and Function Keys* opens. The scroll arrow in the scroll bar shows that there are more pages of text following this one.

- » Press [F3] (NEXTPAGE). A second scroll arrow shows that there is a page preceding this one. Pressing [F2] (PREVPAGE) will show you the preceding page.
- » Press [F7] (CMD-MENU) and select the *cleanup* command.
 The *cleanup* command closes all open menus except the *FACE* frame (you can also use the *cancel* command to exit from a *HELP* frame).

While in a *Help* frame or other text frames, the keys shown in the following table allow you to navigate through the text. These keys supplement NEXTPAGE and PREVPAGE.

Function	Key	Alternative key combination
Moves the cursor up one line	[UP]	[CTRL] [u]
Moves the cursor down one line	[DOWN]	[CTRL] [d]
Rolls the text down one line	-	[CTRL] {f} [d]
Rolls the text up one line	-	[CTRL] {f} [u]
Presents the next frame of text (with two-line overlap)	-	[CTRL] [w]
Presents the previous frame of text (with two-line overlap)	-	[CTRL] [v]
Presents the first frame full of text	-	[CTRL] [b]
Presents the last frame full of text	-	[CTRL] [e]

Table 19: Navigating in text frames

3 Working with files and file folders

This chapter contains information about the most important *FACE* commands for working with files and file folders (directories). It also describes how to configure your *FACE* screen, protect files, and use the wastebasket.

You can create new files and file folders or access existing ones via the *Filecabinet:/home/face* item in the *Office of face* menu. If you select this item the *Directory browser* frame appears, from which you can execute all file functions via the *Actions* menu.

3.1 Accessing files and file folders

Every user is assigned a "home directory" (*/home/face*) when his/her login name is set up on the system; this home directory can be interrogated by way of the environment variable *\$HOME*. This directory (file folder) is where you will be immediately after logging in to *FACE*. You can use the environment variable *\$HOME* as shorthand under both SINIX and *FACE*. You can call the environment variable *\$HOME* using the SINIX command `echo $HOME`. If you are a non-privileged *FACE* user without shell authorization, you take the name of the home directory from the *Filecabinet:/home/login* item in the *Office of face* menu. For a complete explanation of *\$HOME*, refer to the "SINIX V5.41 User's Guide", chapter "The file system". *FACE* lists all files and file folders alphabetically by default. Note that in alphabetical sequencing, uppercase names are listed before lowercase names.

There are other ways in which the files and folders can be listed, such as in chronological order of creation or modification. You will learn how to change the standard order in which files are listed in your filecabinet in the section "Organizing file folders".

For further information about files and file folders (directories), refer to the "SINIX V5.41 User's Guide", chapter "The file system".

You can only access a data object (file or file folder) with a function from the *FACE Actions* menu if the data object is located in the current folder. If this is not the case, you have the following options for changing to the desired position in the directory tree:

- Keep changing from the superordinate file folder into the subordinate one until you arrive at the desired folder.
- Change to the desired folder with the "quick change" function via [F2] (QUICK-CH).

These two options for changing position are described in more detail below.

3.1.1 Changing folders

To change from a superordinate file folder to a subordinate one, proceed as follows:

» Change to the *Office of face* menu and activate the *Filecabinet:/home/face* item.

You are now in your home directory, the highest file folder. All folders within this one are displayed in the *Directory browser* frame.

» Navigate to the folder to which you want to change using the cursor keys.

» Press [RETURN].

The *Directory browser* frame appears displaying all the folders located in the selected folder. The *FACE* message line displays the relative path name of the selected folder.

For information on absolute and relative path names, refer to the "SINIX V5.41 User's Guide".

- » Navigate again to the folder to which you want to change using the cursor keys.
- » Press [RETURN] again.
The *Directory browser* frame appears displaying all the folders located in the folder now selected. The *FACE* message line displays the absolute path name of the selected folder.

Repeat these steps until you reach your desired folder.

3.1.2 Changing folders more quickly

You can change more quickly to another position in the directory structure by entering the name of the folder to which you wish to change, either directly or by selecting it from a list of all the folders in the home directory.

- To enter the name of the desired folder directly:
 - » Change to the *Office of face* menu and activate the *Filecabinet: /home/face* item. You are now in your home directory, the highest file folder. All folders within this one are displayed in the *Directory browser* frame.
 - » Press [F2] (QUICK-CH).
The *Quick Change* menu frame now appears.
 - » Select *Change directory... (input)*.
The input *Change directory* frame appears on the screen.
 - » Enter the path name of the directory to which you want to change. You can specify the path as the relative path name for the current directory. Now press [F3] (SAVE). Path names which are longer than the screen line are shortened by *FACE*, being scrolled to the left so that the beginning of the name is not visible.
The *Directory browser* frame appears displaying all folders in the specified folder. The *FACE* message line displays the absolute path name of the selected folder.
- To select the desired folder:
 - » Change to the *Office of face* menu and activate the *Filecabinet: /home/face* item. You are now in your home directory, the highest file folder. The contents of this file folder are displayed in the *Directory browser* frame.
 - » Press [F2] (QUICK-CH).
The *Quick Change* menu frame now appears.
 - » Select *Change directory... (selection box)*.
You will now see a frame containing the absolute path name of all folders in your home directory.
 - » Now use the cursor keys to select the folder into which you wish to change, and press [F3] (ENTER).
The *Directory browser* frame appears displaying the contents of the selected folder. The *FACE* message line displays the path name of the selected folder.
 - » Now press [F3] (OPEN_FOL) to open the folder.

With the "quick change" function you can also move directly to your home directory. For this you must be in the *Directory browser* frame and the [F2] key must be loaded with QUICK-CH.

- » Press [F2] (QUICK-CH).
The *Quick Change* menu frame now appears.
- » Select *HOME*.

You will now see the *Directory browser* menu frame displaying the folders of your home directory.

3.2 Creating new files and file folders

The following exercises give you practice creating files and file folders with *FACE*. They also provide information on how to name files and file folders.

3.2.1 Creating a file folder

In this exercise, you will create the file folder *cookbook* in the */home/face* frame.

» Select *Filecabinet* from the *Office of face* menu.

» Press [F3] (OPEN_FOL).

A frame whose title is the absolute path name of your home directory appears displaying the contents of your home directory.

» Press [F3] (ENTER) to call the *Actions* menu.

Functions which can be executed at this point are displayed at normal intensity, while those which are not available at this point are displayed on light shading.

» Navigate to the *Create objects* function using the cursor keys and press [F3] (ENTER).

The *Create object* frame appears containing the name of your current directory.

» Enter *cookbook* in the *Name* field and press [F3] (SAVE) to assign the name to the new data object.

You can also enter several names, separated by blanks, in this field. When you have entered all the names, press [F3] (ENTER) to create the folders.

You must inform *FACE* that the data object you wish to create is to be a file folder. A menu titled *Select object* appears on the screen offering you two options: *Folder* and *File*.

» In the *Select object* menu select *Folder*. This instructs *FACE* to create a new folder.

You will receive confirmation in the message line that the specified folder has been created.

The */home/face* frame now lists all the folders in *home/benutzer*, including the *cookbook* folder that has just been created.

3.2.2 Creating a file

In this exercise, you will create a file using the same method you used to create file folders. */home/face* is the active frame following the last exercise.

» Change to the *cookbook* folder which you have just created and open it.

All files that you now create will be created in this folder.

» Press [F3] (ENTER) to call the *Actions* menu.

Functions which can be executed at this point are displayed at normal intensity, while those which are not available at this point are displayed on light shading.

» Navigate to the *Create objects* function using the cursor keys, and press [F3] (ENTER).

The *Create objects* frame appears containing the name of your current folder.

» Enter *schnitzel* in the *Name* field and press [F3] (SAVE) to assign the name to the new data object.

You can also enter several names, separated by blanks, in this field. When you have entered all the names, press [F3] (ENTER) to create the file(s).

You must inform *FACE* that the data object you wish to create is to be a file. A menu titled *Select object* appears on the screen offering you two options: *Folder* and *File*.

» In the *Select object* menu select *File*. This instructs *FACE* to create a new file.

In the message line you will receive confirmation that the specified file has been created.

The */home/face/cookbook* frame now lists all folders and files under */home/face/cookbook*. You will see that the entry *schnitzel* is now included in the */home/face/cookbook* frame and labelled as a *Standard file*.

- » Navigate to the *schnitzel* file using the cursor keys and press [F2] (MARK) to select this file.
- » Press [F3] to change to the *Actions* menu.
- » Navigate to the *Open files* function using the cursor keys and press [F3] (ENTER). When you select *Open files*, the *FACE* screen is completely deleted and an editor (under *FACE* the default is the SINIX editor *ced*, which is also used in this example) is automatically called. You can now use this editor to enter data in the file. You will find information about the editor *ced* in the "SINIX V5.41 User's Guide", chapter on "Other SINIX editors". If *vi* is defined as the default editor in your system, refer to the relevant chapters in the manuals "SINIX V5.41 User's Guide" and "SINIX V5.41 Commands, Volume 2".
- » Type a few lines of text.
Now save the new contents of the file:
- » Press [MENU] to save the contents of the file. If [MENU] is not present on your keyboard, press the key combination [CTRL] [d].
You can now access the command menu of the *ced* editor. Press *q* (quit) to close *ced*. Enter response *y* to the question *Save text in document schnitzel?* Enter *y=yes* or *n=no* that appears in the editor's message line.
You will soon receive a message informing you that the file has been successfully saved.
- » Press [RETURN] to return to the *FACE* screen.

If you want to create files in a folder other than the currently active one, you must either first change to this folder and then create the files as described above, or when specifying the file name enter the relative path name of the file.

3.2.3 Naming and describing files and file folders

Files and file folders can have up to four separate identifiers when they are listed in a menu:

- a name
- a description
- a type
- the date and time the file or file folder was last modified

These four identifiers will only be displayed in full if

- the *Folder Display Format:* field in the form *Preferences - Office Functions* is set to the value *long form*,
- and you have redescribed at least one of the file or file folder entries listed in the menu.

Naming files and file folders

You provide the names for all files and file folders you create in your filecabinet. You can also specify a description. If you do not give one, *FACE* adds a default description, based on the type of file or file folder you are creating.

Follow the relevant guidelines when naming or renaming a file folder or a file. For information about files and file folders, refer to the "SINIX V5.41 User's Guide", chapter "The file system".

Description and type of files and file folders

When you create a new file or file folder, a separate brief description of it can be given along

with its name. If you do not specify a separate description, by default *FACE* uses the type specified for the data object as its description. In most cases this will be *File folder* or *Standard file*. If you give a description of your own, *FACE* will place the data object type after your description.

FACE recognizes the following types of files and file folders:

Name in FACE	Standard name in SINIX
Standard file	Regular file
File folder	Directory
Foreign file	Unknown file format
Data file	Data file
Executable	Executable file
Text	Text file
Form	Form
Menu	Menu

Table 20: File and file folder types

FACE displays the type of the data object in a menu if you have used the corresponding standard parameters in the *Preferences* form to request it.

You cannot change the type of a data object under any circumstances.

However, you can specify the description of a file or file folder as you wish. *FACE* uses the description simply for your information and allows you to change it at any time.

You can thus easily change the description of a data object to something more meaningful to you. Use the *redescribe* command to give a new description or change the old one.

Description guidelines

Follow these guidelines when redescribing a file or file folder:

- Length: A description may contain 14 characters or less. If you attempt to specify a description containing more than 14 characters, the excess characters will be automatically truncated.
- Letters/characters: You can use any combination of numerals, letters, and spaces.
- Special characters that cannot be used: You cannot use a pipe character (*|*), asterisk (***), question mark (*?*), or function keys such as ESC or CTRL.

Redescribing a file

In the following exercise, you will use the file *schnitzel* to practice the *redescribe* command. After the last exercise, */home/face/cookbook* is the active file folder.

- » Position the cursor on *schnitzel* in the */home/face/cookbook* frame.
- » Press [F2] (MARK) to select the file.
- » Press [F3] to call the *Actions* menu.
- » Move the cursor to the *redescribe* option and press [F3].
- » At the prompt in the *redescribe* frame, type a new description (e.g. *ingredients*) and press [F3] (SAVE).

Use any description that will clearly identify the contents of a file. Be sure to follow the guidelines presented in *Description guidelines* in the previous section.

If you do not enter a description before pressing [F3] (SAVE), *FACE* assigns the default

description for text files, *Standard file*, to the file.

- » The new description now appears in the */home/face/cookbook* frame next to the file name *schnitzel*.

You can change the description of a file folder in the same way.

3.3 Changing files and file folders

In this section you will learn how to copy, move or delete files and file folders, and how to retrieve accidentally deleted data objects from the wastebasket.

3.3.1 Copying and moving files and file folders

You may need to change the way you have stored files or file folders in your filecabinet. This may involve copying or moving a file or file folder from one location to another, using the *Copy objects* and *Move objects* functions in the *Actions* menu. In which situations do you use these?

- You want to insure against the loss or corruption of important information
- You want to use parts of one file as the foundation for a second file
- You want to provide another user with a copy of a file

If you copy a file or file folder from the SINIX system to *FACE*, it will retain the permissions that were set for it by the SINIX system. If you want to set different permissions for your files and file folders under *FACE* from those used under SINIX, you need to change them before editing or using these data objects (see the sections "Undeleting files or file folders", and "Setting the security of existing files and file folders").

The steps you follow for *Copy objects* and *Move objects* are identical, but remember the important difference in their results:

- After you copy a file (or file folder) with *Copy objects*, it exists in two places: the original location and the new location.
- After you move a file (or file folder) with *Move objects*, it exists in one place: the new location.

In the following exercise, you will copy a file. You will not practice moving anything because the procedures for copying and moving files and file folders are the same.

Copying a file or file folder

In the previous section you created the file *schnitzel* in the */home/face/cookbook* frame. In the following exercise, you will learn how to create a copy of the *schnitzel* file in the *cookbook* folder.

When you want to copy a file folder, you use the same method. An important thing to remember when organizing your file folders and files is that when you copy or move a file folder, all the file folders and files contained in it are also copied or moved.

After the last exercise, */home/face/cookbook* is the active file folder.

- » Position the cursor on *schnitzel*.
- » Mark this entry using [F2] (MARK).
- » Press [F3] (ENTER) to call the *Actions* menu.
- » Position the cursor on the *Copy objects* function and press [F3] (ENTER).

The *Choose a destination folder* form will appear on the screen. There are two methods for selecting the folder to which you wish to copy the file:

- » In the *Choose a destination folder* form enter the path name of the destination folder which you can enter as the relative path name for the current folder or
- » Press [F2] (CHOICES).

The *Change directory* frame appears displaying all folders under your current directory, in this example */home/face/cookbook*.

- » Position the cursor on the */home/face* folder and press [F2] (CHOICES).

You are now back in the *Choose a destination folder* form, in which the absolute path name

- of the */home/face* destination folder is now entered
- » Press [F3] (SAVE).
In the message line you will receive confirmation that the selected objects have been copied.

Note:

If the destination directory to which you wish to copy or move a file already contains a file of the same name, the *Already existing objects* frame will appear listing these files and their folders. If you do not want to overwrite the existing data object, mark it with [F2]. If you want to overwrite it, press [F3] (ENTER).

3.3.2 Renaming files and file folders

To change the name of a file or file folder, use the *Rename objects* function in the *Actions* menu of the directory browser. The procedure is the same for both files and file folders. In the following example you will learn how to rename a file. You should use the same procedure if you want to rename a folder.

Suppose that the *schnitzel* file, which you moved earlier into the */home/face/cookbook* folder, contains a recipe. In order to rename the *schnitzel* file to more closely reflect what it contains, proceed as follows:

After the last exercise, */home/face* is the active file folder.

- » Change to the *cookbook* folder.
- » Mark the *schnitzel* entry with [F2] (MARK).
- » Press [F3] (ENTER) to call the *Actions* menu.
- » Select *Rename objects*.

You will see a frame whose title contains the name of the file to be renamed: *Rename schnitzel*.

- » Enter in the *Rename* field the new name *wienerschnitzel* and press [F3] (SAVE).

The message line displays confirmation that the file *schnitzel* has been renamed.

If you mark several files or folders for renaming and then select the *Rename objects* function, you will receive the path names of these files or folders in the *Rename* frame. Specify which data object is to be renamed first by positioning the cursor on the appropriate entry and pressing [RETURN]. When you have renamed this file or folder you will receive the list of the remaining data objects for selection.

3.3.3 Organizing file folders

You can choose how many identifier fields are displayed for each item listed in a file folder. You can also specify globally for all folders the order in which the items are listed via *Preferences-Office Functions* in the *Office of face* menu.

Reorganizing the contents of a file folder

In the following exercise, you will use *Preferences-Office Functions* in the *Office of face* menu to change the number of identifier fields displayed and the order of the files and folders for all folders under the home directory.

After the last exercise, */home/face/cookbook* is the active file folder.

- » Open the *Office of face* frame by pressing [F4] (PREV-FRM).
- » Position the cursor on the item *Preferences* in the *Office of face* menu.

- » Press [F3] (ENTER) and select the *Office Functions* command.
- » A frame titled *Office Functions Form* appears.
- » Navigate to the *Folder Display Format:* field.
It controls how much identifier information is displayed for each file in the file folder.
- » Press [F2] (CHOICES) to receive a frame listing the possible entries for this field.
The entries are as follows:

long form	Name, description, file type, and date/time created (in that order) are displayed.
name and description	The default value for this field. Each item listed in the folder shows the file name and the description (either the default description, which is the same as the file's type, or one that you supply using the <i>Redescribe files</i> function in the <i>Actions</i> menu).
name and marks	The file name is displayed followed by a symbol indicating the file type: an asterisk (*) if it is an executable file, a slash (/) if it is a file folder, no mark if it is a standard file or some other file type.
name only	Only the file name is displayed.

Table 21: Possible values for the 'Folder Display Format:' field

- » Press [F2] (CHOICES). A *Choices* menu displays the four values described above.
- » Navigate to *long form* and press [F3] (ENTER) to enter this new field value in the *Folder Display Format:* field.
- » Press [F3] (SAVE) to save this new value. Notice what has happened to the display of the menu items in the *cookbook* file folder. The name and the description of each item are still displayed, but the data and time that the item was created or last modified are also displayed.

If you change the order within a file folder via the *Preferences* menu, the date and time do not change since you have not made any changes to the files and folders themselves, but only to the range of information displayed about these files and folders.

By default this field contains the entry *Name and description*, i.e., all file and folder entries in the *cookbook* folder consist of the name and type together with a brief description.

If you have redescribed a file using the *redescribe* command, your description is displayed after the name of the file. In the third position, following name and description, the file type is displayed in square brackets. The date/time identifier always comes last in the long form.

Changing the order in a file folder

You can change the order in which the contents of a folder are listed via the *Office Functions* menu item in the *Preferences* menu in the same way as you change the order in folders.

The */home/face* folder is the active directory.

- » Press [F4] (PREV-FRM) to call the *Office of face* frame.
- » In the *Office of face* menu, position the cursor on *Preferences*.
- » Press [F3] (ENTER) and select *Office Functions*.
- » A frame titled *Office Functions Form* appears on the screen.

- » Navigate to the *Folder Display Order* field.
- » Press [F2] (CHOICES). A new frame titled *Choices* appears on the screen. The following values are available:

alphabetical	Files and file folders are listed alphabetically in the following order: - names beginning with numbers - names beginning with uppercase letters - names beginning with lowercase letters The <i>Folder Display Order</i> field is set to <i>alphabetical</i> by default.
alphabetical by description	Files and file folders are alphabetized by the description, and then by name when more than one file of a particular type exists.
most recent first	Files and file folders are listed in chronological order, beginning with the most recently created or modified.
least recent first	Files and file folders are listed in reverse chronological order, beginning with the oldest or least recently modified.

Table 22: Order of files in lists

- » Select *most recent first* from the *Choices* menu.
 The *Choices* menu closes and the *Organize cookbook* frame becomes active again. The *most recent first* item now appears in the *Folder Display Order* field.
 - » Press [F3] (SAVE) to record these values.
- If you now change to the */home/face* frame or to another folder, the contents of the relevant folder will appear in the new order.

Note:

The entries dot (.) for the current folder and double dot (..) for the superordinate folder are always listed first independently of the chosen order.

3.3.4 Deleting files and file folders

You should delete file folders and files when they are no longer needed. When you delete a file or file folder in *FACE*, however, it is not immediately irretrievably deleted but is placed in your "wastebasket". The files or file folders will be held there for the number of days specified in your *Office Functions* form (in the menu *Office of face - Preferences*) and then permanently removed from the system.

This facility provides a safety measure. Should you find out that you need a file again that you have previously deleted, you have the means at your disposal to retrieve such files. You cannot delete a file or file folder if one with that name already exists in your wastebasket. For example, if this morning you deleted a file from the */home/face* frame that was named *memo1*, and this afternoon you created a new *memo1* file and then decided you did not need that either, you will be prompted to rename the second file before it will be deleted. After you rename it, the file will be removed from your file folder and held in the wastebasket under its new name.

Deleting a file folder

You cannot delete a file folder if it, or any file or file folder in it, is open. Since your *cookbook* file folder contains only practice examples, you can use it in the following exercise to try out the *Delete objects* function in the *Actions* menu.

- » Navigate to the *cookbook* file folder by pressing [F5] (NEXT-FRM).
- » Close the *cookbook* file folder using [F6] (CANCEL).
You are now in your home directory in the *Directory browser*.
- » Position the cursor on *cookbook* in the */home/face* frame and mark the item with [F2] (MARK).
- » Press [F3] (ENTER) to call the *Actions* menu.
- » Navigate to the item *Delete objects* using the cursor keys and press [F3] (ENTER).
- » The *Delete* frame appears, containing the name of your current folder and the absolute path name of the folder just marked.
You can still change this entry if you decide that you wish to delete another folder after all.
- » Press [F3] (DELETE) to start the deletion process.
You will receive a message stating that the specified objects have been deleted. The *cookbook* folder has been deleted along with all the folders and files it contained, and is no longer present in the */home/face/* frame.

Now you can check the */home/face/WASTEBASKET* folder to confirm that the *cookbook* folder is being held there.

- » Navigate to the *Office of face* frame and select *Wastebasket*.
The *Directory browser* frame appears on the screen with all folders under */home/face/WASTEBASKET*. This frame now contains the *cookbook* folder. If you want to see all the files in *WASTEBASKET* you must open the folder.
- » Position the cursor on *cookbook* and press [F3] (OPEN_FOL).
You will notice that when you delete a folder its entire contents are also transferred to the wastebasket.
- » Close the */home/face/WASTEBASKET/cookbook* frame.

Deleting files

If you wish to delete one or more file(s), proceed as described in the previous section for deleting folders: mark the appropriate files and delete them using the *Delete objects* function in the *Actions* menu. These files should now also be in the wastebasket.

If you want to delete files or file folders irretrievably, you can remove data objects from the wastebasket. You may specify which files and folders are to be deleted from the wastebasket. If you specify a folder, all the folders and files within it will be deleted. Files and folders are deleted from the wastebasket in the same way as they are deleted from any other folder.

Wastebasket

If you select *Wastebasket* from the *Office of face* menu, a new frame titled */home/face/WASTEBASKET* opens in the work area. The entries in this frame are the files and folders you have already deleted. You can edit and manage the files and folders in the wastebasket in the same way as any other file or folder. Remember, however, that *FACE* will remove the files and folders under */home/face/WASTEBASKET* from the menu system after a certain time if you do not cancel the deletion beforehand (see table "Presetting the office preferences").

The section "Filling in the Office Functions form" contains information on how to define the length of time that data objects remain in your wastebasket. The section "Organizing file folders" explains how you can control the amount of information displayed.

The files and folders in the wastebasket are deleted automatically only when you log in to your system. If you have canceled the deletion but not moved the files from the *Wastebasket* folder to another folder, the files will be deleted at the next login.

3.3.5 Undeleting files or file folders

The default amount of time that *FACE* will hold files or file folders in your wastebasket is one day. As a safeguard against your accidental deletion of a file or folder, *FACE* gives you the opportunity of canceling the final deletion within one day. You can change the amount of time that deleted files are held in the wastebasket, and select any number of days between 0 and 30. Refer to the section "Filling in the Office Functions form".

As long as a file or file folder is being held in your wastebasket, you can retrieve and process these again at any time. There are two methods of retrieving files and folders from the wastebasket.

- Change from your current folder to the *Actions* menu and select the *Undelete objects* function. In the */home/face/WASTEBASKET* frame you can then select the data object to be retrieved and the destination folder.
- Select *Wastebasket* from the *Office of face* menu. This option is explained in the following exercise.

Undeleting a file folder

In this exercise, you will learn how to reverse the deletion of a file folder by using the *Undelete objects* command. This command is useful if you have deleted a file and then discover that you still need it.

- » Select *Wastebasket* in the *Office of face* menu.
You are now in the *Directory browser* and all folders in the wastebasket are displayed.
- » Open the *WASTEBASKET* folder by pressing [F3] (OPEN_FOL).
- » Mark an item in this folder using the cursor keys and [F2], and press [F3] to reach the *Actions* menu.
- » Navigate to the *Undelete objects* function and press [F3].
The */home/face/WASTEBASKET* frame appears displaying the contents of the wastebasket.
- » Mark the folder you want to retrieve - in this case *cookbook* - using [F2], and press [F3].
The *Choose a destination folder* frame appears. Press [F2] (CHOICES) to call the *Change directory* frame, in which you can specify the destination folder to which the deleted folder is to be restored.
- » Select (..) to specify the superordinate folder, i.e. */home/face*, as the destination folder.
- » Press [F2]. The *Choose a destination folder* frame now displays */home/face*.

» Press [F3] (SAVE) to restore the *ccokbook* folder to your home directory.

3.4 Managing files and file folders

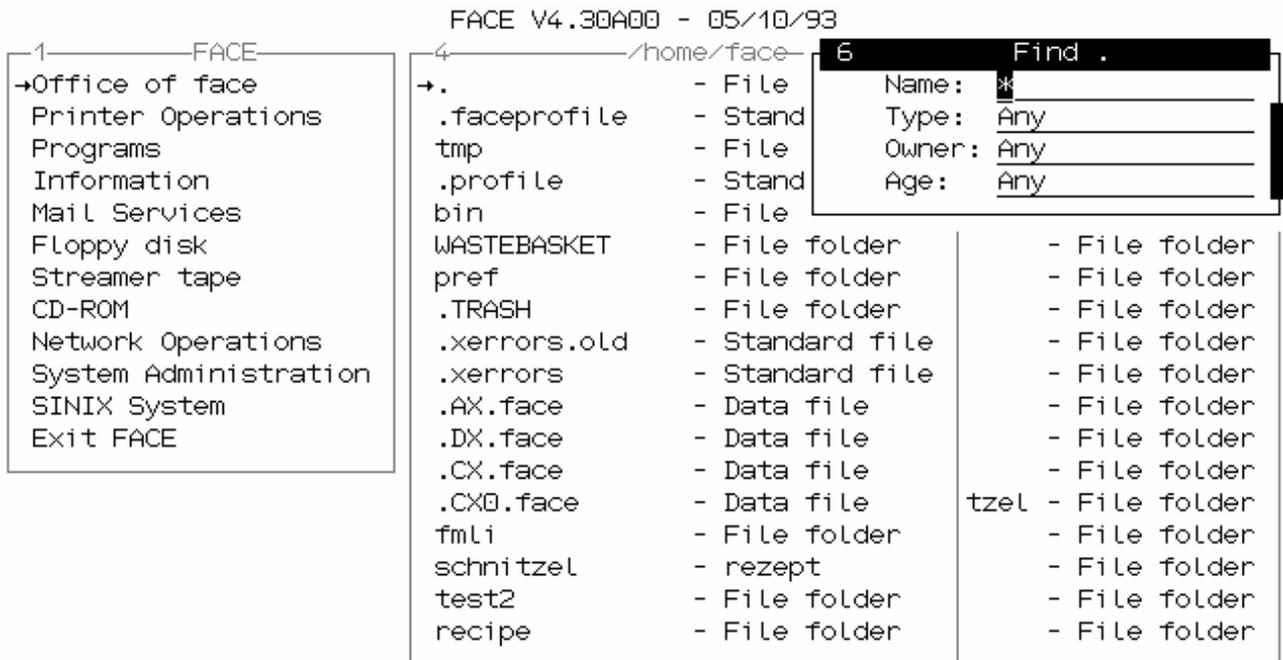
In this section, you will learn how to

- find files and file folders if you cannot remember where they are stored in your filecabinet
- display the contents of files and folders
- define access permissions for files and folders
- access other users' files and folders
- compress and decompress files
- code and decode files
- define specific settings for your *FACE* screen

3.4.1 Finding files and file folders

In *FACE*, you can quickly locate and act on files and file folders anywhere in your filecabinet by using the *Find* function in the *Actions* menu. *Find* will prove useful when you have file folders nested several levels deep, and you cannot remember where you stored a file. The *Find* command starts a search operation in the file folder you have marked, and searches all subordinate file folders.

When you use the *Find* function, a form opens in your work area, allowing you to specify search criteria in the fields provided. Figure 8 is an example of such a form, opened when the */home/face* frame was active. The form contains the following four fields:



Enter the name of a file. Press SAVE when you complete the form.



Figure 8: The 'Find' form

The four fields, and valid search criteria you can enter in them, are listed here for reference:

Name	The <i>Name</i> field contains the name of the data object you want to find; the name can be complete or partial.
Type	The <i>Type</i> field contains the type of the data object. The default entry here is <i>Any</i> . You can use [F2] (CHOICES) in this field to display a complete list of types available to you in <i>FACE</i> .
Owner	The <i>Owner</i> field contains the login name of the owner of the file or file folder. You can use [F2] (CHOICES) in this field to display a list of all logins on the system. The <i>Find</i> command will search for files owned by this login name that exist under the file folder you are currently in in the filecabinet.
Age	The <i>Age</i> field can contain a numerical value that stipulates the number of days since the file or file folder was created or changed. Remember that renaming or or redescrbing a file does not affect its age.

Table 23: Search criteria in the 'Find' form

You start the search by pressing [F3] (SAVE). In contrast to most forms, which are automatically closed on pressing [F3] (SAVE), this form remains open until you explicitly close it with [F6] (CANCEL) or the *cleanup* command. This has the advantage that you can check your search criteria for a second search operation, or enter different search criteria if an object cannot be found.

When *Find* locates files or file folders that meet your criteria, it displays them in an *Objects Found in <file folder>* frame. You can apply functions such as *Copy objects*, *Move objects* or *Delete objects* to objects in this frame. These functions then have the same effect as if you executed them from the folder in which the objects are actually located.

Finding a file

Suppose you have forgotten in which file folder you stored the file *wienerschnitzel* that you created in an earlier exercise. You should proceed as follows:

- » Navigate to the */home/face* frame.
- » Mark the item for the current folder "." (dot) with [F2].
- » Press [F3] (ENTER).
The *Find* function now searches through all file folders from the current one down. By beginning the search from the */home/face* menu, *Find* will search your entire filecabinet.
- » Select the *Find* function from the *Actions* menu.
The *Find* form appears on the screen.
The title in a *Find* form always tells you the point in your filecabinet at which the search will start.
- » Type the name *wienerschnitzel* into the *Name* field. On typing file names containing more than 14 characters, the input line is shifted left to provide space for further inputs. Press [F3] (SAVE).

You can stop after entering the file name as a search criterion, as we are doing here, or you can enter information in the other fields if you want to specify more precise criteria. As the result of the search operation, the *Objects Found in .* menu is displayed, giving the path name of the file or folder, here *cookbook/wienerschnitzel*. The dot in the title of the frame indicates the current folder. This tells you that *wienerschnitzel* is stored in the *cookbook* folder.

You can select the *cookbook/wienerschnitzel* file from the *Objects Found in .* menu and perform any operations, just as if *\$HOME/cookbook* were your current position in the filecabinet. You can use the *Find* function to search for folders in the same way as for files.

3.4.2 Displaying the contents of files and file folders

Now that you have found the file *wienerschnitzel*, this exercise shows you how to display its contents without opening it up for editing.

- » Position the cursor on *cookbook/wienerschnitzel* in the *Objects Found in .* menu.
- » Press [F2] (MARK) and change to the *Actions* menu with mit [F3] (ENTER).
- » Select *Show files* and press [F3] (ENTER).

A new frame with the name of the *wienerschnitzel* file as its title opens in the work area. You may use the following navigation keys to scroll this text frame up or down:

Function	Key combination
Moves the cursor up one line. The text frame does not move.	[CTRL] [u]
Moves the cursor down one line. The text frame does not move.	[CTRL] [d]
Moves the cursor to the start of the text.	[CTRL] [b]
Moves the cursor to the end of the text.	[CTRL] [e]

Table 24: Function keys for shifting the contents of a text frame

- » When you have finished reading, press [F3] (CONT).
- When you use *Show files*, what you are seeing is only a temporary image of *wienerschnitzel*. It follows that you cannot make any changes to a file while viewing it with *Show files*. You can use the *Show folders* function in the *Actions* menu to display the contents of a folder in a text frame in the same way as for a file. However, you will then receive only the names of the data objects in this folder, and not their type or description.

3.4.3 Setting the security of existing files and file folders

You have the option of defining the extent of access other users have to your individual files and file folders. While some files and file folders might require confidentiality, others might also need to be accessed by other users. You can give different access permissions to yourself, your group, and all other users, to write (edit, move, delete) or run/search (open file folders, list the contents of file folders, run executable files or shell scripts) files/file folders.

If you want more information on access permissions for files and file folders, refer to the "SINIX V5.41 User's Guide", chapter "The file system".

- You can protect a file by setting its access permissions so that no one, including you,

can change it. When it is time to update the file, you can temporarily change the permissions level so you can edit the file (write permission). Later, you can reinstate the higher level of protection.

- You can have a high level of protection on all files or file folders in your filecabinet, so no one else can read your files. But you may, for example, want to allow your group to read a specific document. This you can do using the *Office Functions* item in the *Preferences* menu under *Office of face*.

Warning:

If you as a nonprivileged user use the *security* command on a file in another user's filecabinet, although you can set options, the changes you specify will have no effect.

It is important to keep in mind the access permission levels of file folders above the file folder or file you want to change. The permissions on a file or file folder also depend on the access permissions of the file folders in which it is contained.

For example, if you give your group permission to write to a file, that file should be in a file folder that has the same permissions. The members of your group can only write to the file if they are able to access the file folder.

Changing the access permission for a file

Suppose a member of your group needs to edit a file in your filecabinet. To make this possible, you must change the permissions on the file concerned. The following steps describe how to change permissions on the *schnitzel* file, which you created earlier in the */home/face/cookbook* file folder.

- » Navigate to the */home/face/cookbook* folder and position the cursor on *schnitzel*.
- » Press [F2] (MARK) and then press [F3] (ENTER) to change to the *Actions* menu.
- » Select the *Change object attributes* function.

The *Security on <pathname> for <user>* form is displayed on the screen. Notice that the title of this form tells you that you are looking at the current security settings of the *schnitzel* file. The title of the *Security* form always tells you what file or file folder your changes will affect.

There are ten fields in this form. They show the default settings of permissions in your */home/face* menu. Look them over to get an idea of how the same three permissions are set differently for you (the owner), for the members of your group, and for all other users on your system. The ten fields are divided into four sections.

Owner	The current owner's login is displayed. If you are the owner, you can change the permissions. If you are not the owner, you can only look at the permissions. Note that if you change the owner of a file to another user, you cannot change the ownerships back to yourself.
Owner's permissions	Files and file folders in your filecabinet are usually owned by you. You will probably want read (permission to look at the contents of a file), write (permission to change the contents

	of a file), and run/search (permission to run an executable file or list the contents of a file folder) set to <i>yes</i> for you.
Group's permissions	The access permissions displayed here apply to the members of your group. They define what your group members can do with a file or file folder.
All Others' permissions	The access permissions displayed here apply to any other person who might be logged in to your system. They define what other users can do with a file or file folder.

Table 25: Access permissions for files and file folders

In this example, you want to allow a member of your group to be able to edit the *schnitzel* file, so you will need to change the *Group Write Permissions* from *no* to *yes*.

- » Position the cursor on the *Group Write Permissions* field.
- » Press [F2] (CHOICES). The entry in this field changes from *no* to *yes*.
- » Press [F3] (SAVE) to record the new value for this field.

The *Security* form disappears, and the file *wienerschnitzel* in your */home/face/cookbook* file folder is now available to other members of your group to edit, move, or delete.

The access permission for a folder can be changed in a similar manner:

Mark the folder and select the *Change object attributes* function in the *Actions* menu. You can now use the form which appears on the screen to change the access permissions for this file.

3.4.4 Accessing other users' files and file folders

One of the items in your *Office of face* menu is *Other Users*.

When you select *Other Users*, a list of login names is displayed. By selecting a login, you then have access to that user's home filecabinet (which is defined in the environment variable *\$HOME*). However, this is conditional on this user having granted the appropriate permissions to the group or the remaining users, depending on whether you belong to the same group or to the class of the remaining users on the system.

3.4.5 Compressing and decompressing files

FACE allows you to compress files. A compressed file requires less storage space on the hard disk than a non-compressed file. However, you can only compress files which have not yet been compressed. The file will not be compressed if the compression does not save space.

If you wish to edit a compressed file you must first decompress it. Compressed files can, however, be copied, moved within the filecabinet, or stored on floppy disk or streamer tape. You can recognize a compressed file from the extension *.Z* which is appended to the file name.

The following exercise shows you how to compress and decompress the *wienerschnitzel* file.

- » Open the *cookbook* folder.
- » Mark the *wienerschnitzel* file with [F2] and press [F3] to call the *Actions* menu.

- » Select the *Compress files* function and press [F3].
The *Output of compress command* frame appears, displaying information on the file(s) being compressed and the name of the compressed file(s) ending in .Z.
- » Press [F6] (CANCEL) to close the frame.
In the */home/face/kochrezepte* frame the name of the compressed file *wienerschnitzel* is now *wienerschnitzel.Z*. Instead of *Standard file*, the type specified is now *Data file*.

Warning:

DO NOT edit a compressed file by changing or inserting characters, otherwise the original file cannot be restored.

To decompress the file again for editing, proceed as follows:

- » Mark the *wienerschnitzel* file with [F2] and press [F3] to reach the *Actions* menu.
- » Select the *Decompress files* function and press [F3].
The *Output of uncompress command* frame appears on the screen, containing information on the file(s) whose original status is being restored, together with the name(s) of the restored file(s), which no longer contain .Z.
- » Press [F6] (CANCEL) to close the frame.
You can now edit the *wienerschnitzel* file.

3.4.6 Coding and decoding files

To send binary files via the mail function to another user on your system or on a remote system, you must first convert the files to 7-bit ASCII format. Binary files are, for example, compressed files as described in the previous section or compiled program files. To code files, you use the *Uuencode files* function in the *Actions* menu.

The recipient of the coded file must remove the headers which are added when a file is sent, and decode the file, i.e. return it to its original format, before the file can be used again.

The following example shows you first how to code and send off a file, and then how to decode a coded file.

- » Compress the *wienerschnitzel* file again as described in the previous example.
- » Mark the *wienerschnitzel.Z* file with [F2] and press [F3] to call the *Actions* menu.
- » Select the *Uuencode files* function and press [F3].
The *Output of uuencode command* frame appears, containing information on the file(s) being coded and the name(s) of the coded file(s), ending in .U.
- » Press [F6] (CANCEL) to close this frame.
In the */home/face/kochrezepte* frame the name of the coded file *wienerschnitzel.Z* is now *wienerschnitzel.Z.U*.
- » Mark this entry with [F2] and press [F3] to reach the *Actions* menu.
- » Select the *Send mail* function
The *Send mail* form appears on the screen for you to fill out. The following fields are important for the current example:

Username	Here you can specify one or more user(s) to whom the mail is to be sent. The names must be separated by blanks, tabs or line breaks. Instead of an addressee, a mail group can be
-----------------	---

	specified. The file is then sent to all users belonging to the mail group. [F2] (CHOICES) gives you a list of all possible user and mail group specifications.
Hostname	This the host to which the mail is sent. Enter the name of a system known in the network. [F2] (CHOICES) gives you a list of all possible entries for <i>Hostname</i>
Filename	The name of the file you have marked is already entered here, i.e. <i>/home/face/kochrezepte/schnitzel.Z.U</i>
Subject	Here you enter the subject of the mail. This will be displayed to the addressee when the mail arrives.
Message	Here you can enter the text of your message if you have not specified a file to be sent.

Table 26: The 'Send mail' form options

Leave the *Message* field empty for this example.

- » Press [F3] (SAVE) to close the form.

You will find more detailed information on the *FACE* mail services beginning in section "Mail services". In the previous section only the *Send mail* function in the *Actions* menu was described. The *Mail Services* menu in the *FACE* main menu offers you a wider range of options for working with mail.

If you want to edit a coded file, you must first decode it. The following example shows you how to do this using the *wienerschnitzel.Z.U* file.

- » Press [F2] (MARK) to mark the file, and [F3] to reach the *Actions* menu.
- » Select *Uuencode files*.

The *Output of uudecode command* frame appears on the screen, displaying information on the file(s) whose original status is being restored, and the name(s) of the restored file(s), which no longer contain the *.U*.

- » Press [F6] (CANCEL) to close this form.

If you want to edit this file further, it still requires decompressing.

3.4.7 Setting your office preferences

FACE provides you with a default setup. You do not therefore have to worry about setting up your *FACE* screen when working with *FACE* for the first time. You will learn in the following sections how to change the standard setup, should you so wish.

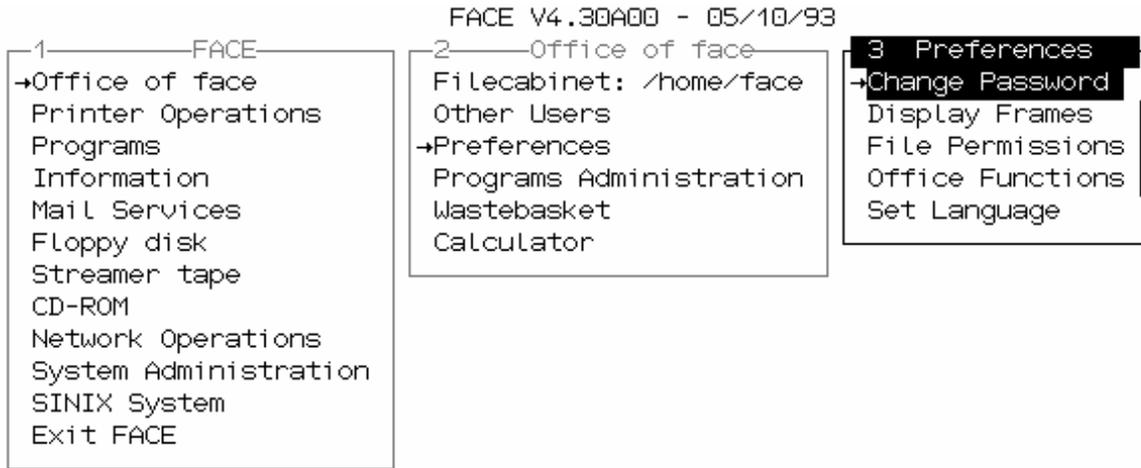
You have already learned in the section "Organizing file folders" how you can organize the way individual files and file folders are displayed in your filecabinet. You have also learned how you can limit or expand the access that other people have to individual files and file folders in your filecabinet.

In this section you will learn how to

- organize your entire filecabinet
- change the access permissions for your entire filecabinet
- customize the wastebasket feature
- specify other frames to be opened automatically when you log in

- change your password
- choose the editor you want to use when you are editing files

In *FACE*, the above are known as preferences. The ones that you may customize are listed in the *Preferences* menu, shown in figure "The 'Preferences' menu".



Move to an item with arrow keys and press ENTER to select the item.



Figure 9: The 'Preferences' menu

The items in the *Preferences* menu are explained in detail in the following:

Change Password	Enables you to change the password to your login.
Color Attributes (for color terminals only)	Allows you to customize your <i>FACE</i> colors. This item will only appear in the <i>Preferences</i> menu if your terminal has the appropriate graphics emulation and a color monitor.
Display Frames	Allows you to automatically display two or more menus when you log in.
File Permissions	Enables you to set access permissions for existing files and files you will create in the future. Permissions may be set to read, write, or run/search for you, your group, or all others.
Office Functions	Enables you to set the number of days before a file or file folder is permanently deleted from your wastebasket, choose whether to be

	prompted before it is actually deleted, select a default editor, specify file folder display format and order, and specify whether to invoke <i>FACE</i> automatically when you log in.
Set Language	Press [F2] CHOICES to select one of the available languages. The standard languages available to you are German and German with umlauts. The language selected takes effect when <i>FACE</i> is next invoked.

Table 27: Options in the 'Preferences' menu

Change Password

Using a password when you log into your system is like having a key. You should periodically replace your password with a new one.

You can change your password through the *Change Password* item in the *Preferences* menu as follows:

- » Select *Office of face* from the *FACE* main menu.
- » Select *Preferences* from the *Office of face* menu.
- » Select *Change Password* from the *Preferences* menu.

You are now prompted once to type your old password. Then you are prompted twice to type your new password. Conclude each input by pressing [RETURN].

For further information on SINIX passwords, refer to the "SINIX V5.41 User's Guide", chapter "Basics for SINIX system users".

Color Attributes

You can only change the color attributes if your terminal is equipped with a color monitor and a color terminal emulation facility; if not, this menu item will not appear.

The *Color Attributes* entry allows you to change the default colors of your *FACE* frames. You can change the colors of the following screen attributes:

Screen attribute	Default color
Title	cyan
Frame text	cyan
Active frame border	red
Active frame title bar	red
Active frame title text	cyan
Inactive frame border	blue
Inactive frame title bar	blue
Inactive frame title text	cyan
Highlighted bar	blue
Screen label key bar	white

Table 28: Color attributes for the FACE screen

FACE will validate each color you select to ensure that you do not choose the same color for an attribute and the background; this would render parts of the screen unreadable.

Changing color attributes

- » Select *Preferences* from the *Office of face* menu.
- » Select *Color Attributes* from the *Preferences* menu.
- » Use arrow keys to navigate from field to field and [F2] (CHOICES) to select the colors you want.
- » Press [F3] (SAVE) when you are finished to store the changes.
A confirmation is displayed in the message line:
The Color Attributes have been updated
The colors you select will be displayed as soon as you press [F3] (SAVE). If you do not like the way they look, the form remains open so you can change them.
- » Press [F6] (CANCEL) to close the *Color Attributes* form.

How to display more menu frames when you log in

The *Display Frames* entry allows you to specify up to four menus to be displayed automatically after you log in. You can enter the full path name of any menu, including ones you have created yourself. For your convenience, however, some frequently used *FACE* menus can be easily entered in this form via the key [F2] (CHOICES):

- *Filecabinet*
- *Mail Services*
- *Office of face*
- *Preferences*
- *Printer Operations*
- *Programs*

The *Printer Operations* menu will not be listed as a choice unless printers are configured for the installed spooler and the print job management is running. The *Programs* menu will not be listed as a choice unless at least one program has been installed for use in *FACE*.

The following section will show you how to have certain frames displayed automatically when you log in:

- » Select *Preferences* from the *Office of face* menu.
- » Select *Display Frames* from the *Preferences* menu.
- » Use the arrow keys to navigate from field to field and [F2] (CHOICES) and [F3] (ENTER) to select the menus to be displayed. Or you can type the full path name of any menu frame.
- » Press [F3] (SAVE) when you are finished. *FACE* will display an appropriate message if you have typed an invalid path name or named the same menu more than once. Then you should correct your input. When the input is valid, a confirmation message will be displayed on the message line.

The next time you log in, the menus you have specified will be displayed.

File Permissions

When you select *File Permissions* from the *Preferences (Office of face)* menu, you can change the default access permissions for all new file folders and files (the permissions they will have when you create them). The permission levels you set here do not affect previously created file folders and files.

Typically, you have complete access permissions to your own file folders and files, while the members of your SINIX group and all others can view but not change or delete your work. In fact, it is particularly important that your own Run/Search permissions be set to *yes*. If they are set to *no*, you will be unable to view the contents of file folders, or create new files and

file folders, or run programs.

You can change the permission levels for any existing single file or folder with the *Change object attributes* function in the *Actions* menu.

However, it is advisable not to reset the default permission levels that have been set by *FACE*.

Office Functions

The following example explains how the *Office Functions* form works:

The *Office Functions* form includes not only the fields for setting the number of identifier fields for files and folders and the field for defining the order in which files and folders are displayed, but also several other fields that allow you to customize your *FACE* screen according to your own requirements.

You open this form as follows:

- » Select *Preferences* from the *Office of face* menu.
- » Select *Office Functions*.

The seven fields available to you are described below. You can change those you want to change. Remember, you can also press [F1] (HELP) to get help on the field you are in.

Delete objects from my Wastebasket after (# of days):	Specify the number of days (between 1 and 30) that data objects are to be kept in the wastebasket before being permanently removed.
Prompt before deleting objects from my Wastebasket:	Specify: <i>yes:</i> <i>FACE</i> notifies you, when you log in, which data objects in the wastebasket are scheduled for permanent removal. You can opt for their removal, or prevent this happening. <i>no:</i> <i>FACE</i> removes the data objects after the specified number of days without telling you. Files and file folders are not deleted if you do not log in to your system, even if they are scheduled for deletion that day. Also, if you cancel a deletion but do not move the files out of the <i>/home/face/WASTEBASKET</i> file folder, those files are then scheduled for deletion the next time you log in.
Default Editor:	Specify the editor that <i>FACE</i> is to invoke when you open a standard file. The specified editor must be available on your system. The field is set initially to <i>ced</i> . You can change the default editor to any editor that has been installed on your system, e.g. <i>vi</i> or <i>MAXed</i> .
Folder Display Format:	Specify which information will be displayed for data objects contained in file folders: <i>long form, name and description, name and</i>

	<i>mark</i> , or <i>name only</i> . New file folders and file folders that currently exist will be displayed according to the value you enter in this field.
Folder Display Order:	Specify how the items in a file folder are to be ordered: <i>alphabetical</i> , alphabetical by description, most recent first, or <i>least recent first</i> . New file folders and file folders that currently exist will be ordered according to the value you enter in this field.
Confirm at Exit:	Specify: <i>yes</i> : You will be prompted as to whether you really do want to exit <i>FACE</i> or continue working with <i>FACE</i> . <i>no</i> : You will exit <i>FACE</i> immediately with no option to change your mind.
Invoke FACE at login:	Specify: <i>yes</i> : <i>FACE</i> is invoked automatically when you log in. <i>no</i> : You must invoke <i>FACE</i> in the SINIX shell by using the <i>face</i> command. This field will only appear in this form if your login name has been entered under the SINIX system.
Spoolsystem:	Here you specify which spool system you wish to use for printing. Use [F2] CHOICES) to select from the possible entries for this field.

Table 29: Presetting the office preferences

Set Language

Press [F2] (CHOICES) to select one of the available languages. The standard languages available to you are *English*, *German* and *German with umlauts*. You can only select *German with umlauts* if you are working at an 8-bit terminal, i.e. a terminal that can display umlauts. Representation of the umlauts on a 7-bit terminal will be incorrect. If you can see the wrong characters or no umlauts on your screen, you must select *German* (i.e. no umlauts). Save your selection by pressing [F3] (SAVE). The language selected takes effect when *FACE* is next invoked.

4 The FACE main menu

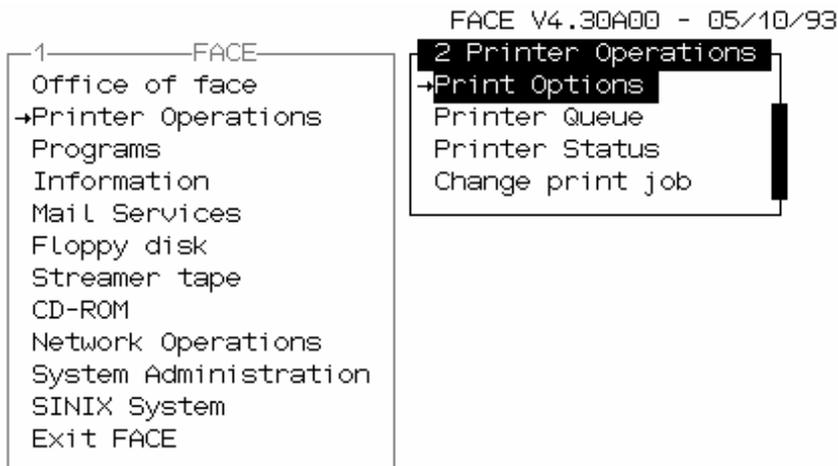
In this chapter you will learn how to: print out files on a printer, manage and control programs using *FACE*, send mail to other users, access the SINIX shell, work with external volumes such as floppy disks, streamer tapes and CD-ROMs, and how to call up information about your system.

4.1 Printer operations

FACE provides you with convenient tools for printing the contents of text files, so-called spool systems. *FACE* supports different versions of SINIX SPOOL as well as the AT&T Spooler. You will receive both SINIX SPOOL and the AT&T Spooler with your system. Which version of SINIX SPOOL is available depends on your SINIX system. It is the job of the system administrator to set up one or more SPOOL systems and to configure the printers.

The following sections describe the *FACE* print functions as available to you if you are working with a spooler *other than* SINIX SPOOL 4.0 arbeiten. SINIX SPOOL 4.0 has a wider range of functions as well as its own interface, which is described in the manual "SPOOL V4.0 FACE User Interface". If SINIX SPOOL 4.0 is available on your system, you can also access this interface from *FACE*.

When you have selected the *Printer Operations* item in the *FACE* main menu, your screen should look like this:



Move to an item with arrow keys and press ENTER to select the item.



Figure 10: The 'Printer Operations' menu

4.1.1 Selecting the spool system

FACE does not proffer a default spool system. Depending on the configuration of your system you have a choice of several spoolers. You must therefore specify the spooler you wish to work with. If you have not specified a spool system and you wish to print a file, *FACE* asks which spooler you wish to use for printing. Take the following steps to specify the spool system to be used by *FACE* (you confirm selection of each menu item by pressing [RETURN]):

- » Select *Office of face* from the *FACE* menu.
- » Select *Preferences* from the *Office of face* menu.
- » Select *Office Functions* from the *Preferences* menu.
- » Use the arrow keys to navigate to the *Spoolsystem* field in the *Office Functions* form. Select the desired entry by using the key [F2] (CHOICES).
All spool systems available in *FACE* are offered here for selection.
Should you select the *interactive* entry here, a further menu is displayed before each print action. You use this menu to specify the relevant spooler.
- » Save your settings in the *Office Functions* form by pressing [F3] (SAVE). This ensures that the spooler you have selected remains stored when you log off from *FACE*.
The *Office Functions* form is closed. *FACE* then displays the following message in the message line: *Office Functions have been updated.*
By pressing [F6] (CANCEL), you can leave the form without saving any changes that may have been made.

Note:

The list you are offered for selection contains only the spoolers which are installed on your system and are configured for the printers. These must be set by your system administrator.

4.1.2 Printing files

You can print a file using the *Print objects* function in the *Action* menu. *FACE* offers you two options for printing a file:

- You can print a file directly, without setting any specific values, via the *Print* option under *Print objects*. In this case *FACE* uses the preset values in the *Print Options* form in the *Printer Operations* menu under the *FACE* main menu. You can read in the next section which values these are and how you can change them.
- You can set your own values for the file you wish to print out. This involves selecting the *Print with options* function under *Print objects*. A form appears on the screen in which you can define the print options for the current print job.

Note:

If you are still using the old directory browser to execute the file and archive functions, both these options are available to you if you select the *print* command from the Command Menu.

In the following exercise you will print out the *wienerschnitzel* file, for which specific values

must be set.

- » Mark the *wienerschnitzel* file in the *cookbook* folder using [F2] , and press [F3] to reach the *Action* menu.
- » Select the *Print objects* function.
The *Print* frame will appear, offering you the two possibilities *Print* and *Print with options*. If you select *Print*, your file will be sent directly to the printer and printed with the default settings.
- » Select *Print with options*.
The *Print with options* form appears on the screen, in which you can set the following values:

copy files before printing	Enter: <i>yes</i> : a copy of every print file is created before printing. This has the advantage that you can continue working on the file immediately after the print job has been sent, i.e. you need not wait until the print job is complete. <i>no</i> : no copies of the print file are created before printing.
delete files after printing	Enter: <i>yes</i> : the file is deleted after printing. <i>no</i> : the file continues to exist after printing.
notify user on job completion	Enter: <i>yes</i> : you will be informed by main once the file has been printed. <i>no</i> : you will not be informed when the print job is completed.
from page	If you enter 0 here, the file will be printed as of the first page. If you enter a number greater than 0, the file will be printed as of this page.
to page	If you enter 0 here, the whole file will be printed. If you enter a number greater than 0, the file will be printed up to this page. The number you specify determines the last page to be printed.
other print options	Here you can specify further options which affect the SINIX command used by the relevant spooler. The AT&T Spooler reacts to the SINIX command <i>lp</i> , while SINIX SPOOL reacts to the SINIX command <i>lpr</i> . ¹⁾
priority	Here you can specify the priority for the processing of your print job. The possible values vary depending on the spooler you have selected. The description of your particular spooler will tell you which values are

	apply in your case. This field contains a default value which you need not change for normal print jobs.
number of copies	Enter here the number of times your file is to be printed.
selected printer group	Enter here the name of the printer group on which your print job is to be executed. Press [F2] (CHOICES) to receive all possible entries for this field.

Table 30: Possible settings in the 'Print with options' menu

¹⁾ You will find information on the lp and lpr commands in the manual "SINIX V5.41 Commands, Volume 2 L-Z"

Note:

Note that you can only change the individual settings if your chosen spooler supports this option. If you are unable to set a value, this means that the appropriate field in the form is not active.

- » Select from this form the options with which you wish to print your *wienerschnitzel* file.
- » Press [F3] (SAVE) to print the file with the selected values.

4.1.3 Defining print options

To set values for all print jobs which are to remain valid beyond your current *FACE* session, you must use the *Print Options* item in the *Printer Operations* menu as follows:

- » In the *FACE* menu select *Printer Operations*.
- » In the *Printer Operations* menu select *Print Options*.

The *Print Options* frame appears, in which you can set the appropriate values.

In the *Print Options* form you must fill out the same fields as in the *Print with options* form described in the previous section. Only the *from page* and *to page* fields are missing. The values you set here will be stored separately for each spooler you select. When you end your *FACE* session these values will be stored for the next session.

If you want to print a file from the *Action* menu without specifying any options, these preset values will likewise be used as default values.

4.1.4 Managing and processing print jobs

By selecting the *Printer Operations* item in the *FACE* menu, you can display information on current print jobs or on the attached printers, and you can change or delete active print jobs.

Information on current print jobs

By using *Printer Queue* in the *Printer Operations* menu, you can obtain information about the requests queued to the printer(s), which of the available printers is least busy, and when your job will be printed.

To receive this information:

- » Select *Printer Operations* from the *FACE* menu.

» Select *Printer Queue* from the *Printer Operations* menu.

The *Printer Queue* frame appears, containing the following specifications on the current print jobs:

Jobname	Name of the file being printed or the number of the print job.
User	Name of the user who sent the print job.
P.-Group	Name of the printer group or the printer on which the print job is executed.
copies	Number of copies of the file to be printed.
priority	Priority for the processing of your print job.
Time	Time at which a print job was sent.

Table 31: Fields in the 'Printer Queue' frame

Depending on which spooler you have selected, some of the fields in the *Printer Queue* frame may contain no entry, or individual fields may display a question mark ?. If more than eight print requests are queued, you can use the arrow keys to obtain an overview.

Printer status

Before you can print a file on paper, you need to select a printer, and ensure that it is currently working. You do this via the *Printer Status* item in the *Printer Operations* menu. The following procedure tells you how to use it:

- » Select *Printer Operations* from the *FACE* menu.
- » Select *Printer Status* from the *Printer Operations* menu.

A frame is displayed, showing a list of the available printers. The individual fields have the following meanings:

Printer	Name of the printer
Hostname	Name des host to which the printer is attached
Status	Current status of the printer. The entries differ depending on the spooler selected.
Jobname	Name of the file being printed or the print job.
P.-Group	Name of the printer group to which the printer belongs.
Pages	Number of pages already printed.

Table 32: Fields in the 'Printer Status' frame

If there are no printers available, *FACE* displays the following message in the frame:

There are no defined printers to get the status of.

If your system has a printer installed (i.e. available), but your printouts do not appear at the printer, talk to your system administrator.

Processing print jobs

In the *Printer Operations* menu you can use *Change print job* to delete a current print job, to change the print group on which it will be printed, or to specify a different priority for the print

job.

Deleting a print job

- » In the *FACE* menu select *Printer Operations*.
- » In the *Printer Operations* menu select *Change print job*.
A frame appears, containing all current print jobs identified by the specification of a job number and the user who initiated the respective print jobs.
- » Mark the print job you wish to edit by pressing [F2].
The *Job <job-id>* menu appears, in which you can now choose whether you want to delete the print job, change its print group, or change its priority.
- » If you select *Delete*, the print job will be deleted without your being asked for confirmation.

Changing the print group

- » In the *Job <job-id>* menu select the *Change printer group* option.
A form appears, containing the currently valid printer group. You can now change this value. The *Change printer group* option is only available if your chosen spooler supports it.

Changing the priority

- » In the *Job <job-id>* menu select the *Change priority* option.
A form appears, containing the currently valid priority for your print job. You can now increase or decrease this value depending on your chosen spooler. The *Change priority* option is only available if your chosen spooler supports this option.

When you have entered your changes under the *Change print job* menu item, the frame displaying the jobs is updated. If there are no jobs left which can be changed, this frame is also closed and *FACE* displays the message: No more print jobs found.

4.1.5 Printing with SINIX SPOOL V4.0

SINIX SPOOL V4.0 offers you extensive functions for using printers in a network and printing texts. In contrast to the other spool systems available under *FACE*, SINIX SPOOL V4.0 has its own interface, which is described in the manual "SPOOL V4.0 FACE User Interface". If SINIX SPOOL 4.0 is available on your system and a printer is configured for it, you can access the SINIX SPOOL V4.0 interface from *FACE*.

The SINIX Spool functions include the following:

- printing documents
- printing specific pages from documents
- ensuring data security during printout
- printer queue management
- checking available printers
- checking available fonts
- checking available paper formats

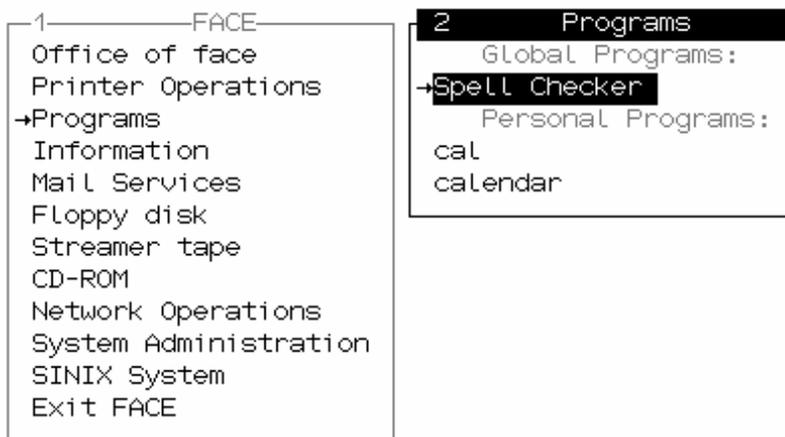
For detailed information on SINIX Spool V4.0 and its use in *FACE*, refer to the manuals "SINIX SPOOL V4.0 FACE User Interface" and "SINIX SPOOL V4.0 User Guide".

4.2 Programs

A program is an executable file (also called an application). An executable file can be:

- a shell script that you write
(for information on how to write a shell script, refer to the "SINIX V5.41 User's Guide", chapter "The shell")
- a SINIX command
(for detailed information on the SINIX commands, refer to the manuals "SINIX V5.41 Commands, Volume 1" and "Volume 2")
- or a complicated application with many features (e.g. a spreadsheet).

The *Programs* menu allows you to access other applications installed on your system without your having to leave the *FACE* main menu. The *Programs* menu will include a spell checker when *FACE* is first installed. If your system administrator has installed other programs for general use, these are also accessible via this frame. You can run any program in the *Programs* menu by simply selecting it.



Move to an item with arrow keys and press ENTER to select the item.

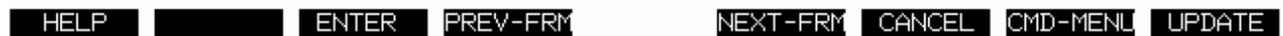


Figure 11: The 'Programs' menu

4.2.1 Spell checker

The *Spell Checker* item in the *Programs* menu invokes the SINIX system program *spell*, which checks for spelling errors in your files. The procedure for using it is as follows:

- » Select *Spell Checker* from the *Programs* menu.
A form titled *Spell Checker* appears in which you can enter the name of the file to be checked for spelling errors.
- » In the form, type the path name of the file you want to check.

You must use the full path name (path from *root*) or relative path name (path from the current file folder) of the file you want to check. A file name by itself is acceptable only when the file is located in the file folder you were in *before* you navigated to the *Programs* menu. Press [F2] (CHOICES) to see a list of such files.

- » Press [F3] (SAVE).
A new frame will open in the work area, listing possible misspellings in the file.
- » Press [F6] (CANCEL) to close the frame.
After you have reviewed the list, you can edit the file and correct the misspelled words using your editor.

4.2.2 Using other programs

FACE allows you to add other programs to the existing menu system. These are then made available to you in the form of menu items that *FACE* produces automatically. The section titled *Programs administration* instructs you how to add programs to the *FACE* system yourself. Talk to your system administrator if you wish to use certain programs in conjunction with *FACE*.

Be sure to obtain information on how to use the program you have selected, how to save your work, and how to exit from the program, before you use it.

Follow the procedure below to invoke a program under *FACE*. This method is suitable for any program listed in the *Programs* menu.

- » Select *Programs* from the *Office of face* menu.
- » Select the program you want to use from the *Programs* menu.
- » If the program requires command line arguments to run, you will see the prompt
Enter arguments for program:.
- » Type the arguments and press [RETURN].
You can name files using their full path name (path from *root*) or their relative path name (path from the current file folder).
- » Once you have exited from a program, a prompt instructs you to press [RETURN]. Do so, and the *FACE* screen reappears.

4.2.3 Programs administration

FACE distinguishes between global and personal programs. Global programs are added to *FACE* and maintained by the *FACE* system administrator. Personal programs are added to *FACE* by individual users, and are maintained by them.

Both personal and global programs are listed in the *Programs* menu. Global programs appear in every user's *Programs* menu. The personal programs you have defined for your own menu system appear only in your *Programs* menu.

You require shell authorization if you wish to add personal programs. In other words, if you wish to add programs of your own, the *SINIX* menu item must appear in your *FACE* menu.

You can add personal programs to your *Programs* menu using the *Programs Administration* item from the *Office of face* menu.

The *Programs* menu is automatically updated to show the addition, modification, or removal of a program the next time you open it. If the *Programs* menu is currently open on your screen, you can update it immediately by navigating to it and executing the *update* command.

Adding a program

Global programs are added to your *Programs* menu by your system administrator. You can add personal programs to your *Programs* menu that you have written or that are of no interest to other users.

This exercise explains how to add a personal program to your *Programs* menu.

- Select *Office of face* from the *FACE* menu.
- Select *Programs Administration* from the *Office of face* menu.
- Select *Add Programs* from the *Programs Administration* menu.

A form titled *Add Programs* will appear. This form displays four fields in which you can specify the name of the program to be added.

Notice that some of the fields in the form already contain default values:

Program Menu Name

Type the name of the program as you would like it to appear in the *Programs* menu, and press [RETURN]. The name must be from 1 to 42 characters long and should help you remember what the program does.

Name of Command

Type the full path name of the program and press [RETURN]. If the program is included in the path of the environment variable, you need only type the program name.

Working Directory

This field contains as a default value the name of the current working directory. This will normally be the full path name of your file folder specified in *\$HOME*, i.e. */home/face*. This field defines the file folder you want to be in while the application is running, and where files created by the application will be placed. If the program does not create files, or if you want to stay in the current file folder, you can just enter a dot (.); this is computer shorthand for "current folder".

Prompt for Arguments

If you want the user of this program to be able to supply arguments, such as a file name, or an option to the program, then this field should be set to the value *yes*. If a user will never need to supply arguments to this command, set this field to the value *no*.

» Press [F3] (SAVE) to save the values you have just entered in the *Add Programs* form. The next time you select *Programs* from the *Office of face* menu, the program you have added will be listed. When you select it, it will be executed.

Listing personal programs

You can display a list of just the personal programs you added by means of the item *Add Programs* in the *Programs Administration* menu.

» Select *List Programs* from the *Programs Administration* menu.

The *List Personal Programs* menu appears. Notice that global programs are not listed. You can select programs from this menu, just as you can from the *Programs* menu. If you have not added any personal programs to your *Programs* menu, the message *No Programs Installed* will appear on the message line.

» Press [F6] (CANCEL) to return to the *Programs Administration* menu.

Modifying a personal program

You are not allowed to modify a global program, but any of your personal programs can be modified whenever you wish. Use the following procedure to modify an existing personal program:

- » Select *Modify Programs* from the *Programs Administration* menu.
The *Modify Personal Programs* menu appears and lists the names of all personal programs you have added.
- » Select the program you want to modify from the *Modify Personal Programs* menu.
The *Modify Programs* form appears, showing the values you entered in the fields when you added this program to your *Programs* menu.
- » Type the desired changes in the relevant fields of the form.
Press [F3] (SAVE) to save the modifications you have made. You will be returned to the *Programs Administration* menu.

Removing a personal program

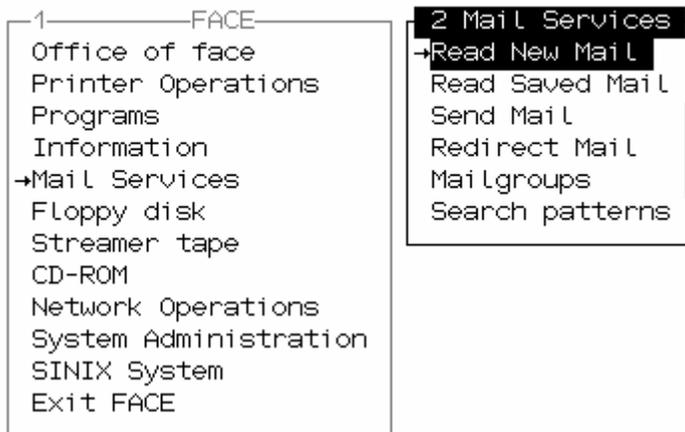
You are not allowed to remove a global program from your *Programs* menu, but any of your personal programs can be removed whenever you wish. Use the following procedure to remove a personal program:

- » Select *Remove Programs* from the *Programs Administration* menu.
The *Remove Personal Programs* menu appears, and lists all the personal programs you have added.
- » Select the program you want to remove.
The *Confirm Delete of Program* frame will appear and displays the message *You are about to delete the program with the name of the selected program*.
- » If you decide you do not want to remove this program, press [F6] (CANCEL). If you want to remove the program, press [F3] (CONT). You will be returned to the *Programs Administration* menu.

4.3 Mail services

Other users who have a login name on your system or whose computer is networked with yours can send electronic messages to your login name or receive messages from your login name. In *FACE*, all messages are collected together as mail. Newly arrived messages are collected in a list as in a menu. They can be saved in a second list. Using *Mail Services*, you can read the mail that has arrived, reply to it and also, if you so wish, store the mail. Selecting the item *Mail Services* opens the *Mail Services* menu. *Mail Services* manages the electronic mail.

The *Mail Services* menu looks like this:



Move to an item with arrow keys and press ENTER to select the item.

HELP ENTER PREV-FRM NEXT-FRM CANCEL CMD-MENL

Figure 12: The 'Mail Services' menu

4.3.1 Read mail

When you activate the *Read New Mail* or *Read Saved Mail* items in the *Mail Services* menu, a menu opens which lists this mail, if any is available.

The newly arrived messages or messages you have stored earlier are listed in these menus in the order of their arrival. The following information is displayed for each message:

- Message number (the oldest message has the number 1)
- Sender
- Date of receipt
- Size of message (number of lines)
- Subject of message (if specified by sender).

You can look at the individual messages like files in a file folder as follows:

- » position the cursor on the line of the message and press [RETURN].

This opens a text frame that displays the contents of the message.
If you also wish to save or reply to a message, then you can use the corresponding commands, available on the function keys, to do so.

[F1]	[F2]	[F3]	[F4]	[F5]	[F6]	[F7]	[F8]
HELP	REPLY	SAVE	MAILB OX	DELET E	CANCE L	UPDAT E	CHG-K EYS

Table 33: Function key assignment for 'Read Mail'

With the function key commands, you deal with the message that is viewed in the open text frame. If no message is displayed in a text frame, you process the message listed in the menu, on which the cursor is positioned.

If you wish to reply to a message, you can display the *Send Mail* form by pressing [F2] (REPLY); here the sender of the mail message in question is automatically entered as the recipient, and the title of the message is also taken over.

New mail is incorporated in the list that you activate through the *Read New Mail* function. If you wish to save the new mail, you can move it from the new mail list (file folder *\$HOME/mbox*) into another list by using [F4] (MAILBOX). The mail message is automatically removed from the list of new mail. Mail stored in this way is then available to you again through the *Read Saved Mail* command.

Should you wish to save new mail under a file name that you select, you should use the key [F3] (SAVE). The mail message also remains in the list of new mail.

The lists of new and saved mail are not automatically updated following delete actions or if new mail is received in the interim. To update the lists, press [F7] (UPDATE).

For information on the commands assigned to the function keys, refer to the section titled "All function key commands".

4.3.2 Reading selected mail

With *FACE* you have the option of having only selected mail displayed, e.g. mail on specific subjects or from certain users. This is done via the *Search patterns* item in the *Mail Services* menu. When you select *Search patterns* you will receive a form in which to specify which mail are to be displayed when you read new or stored mail.

You can fill out the following fields in the *Search patterns* form:

Pattern for senders

Enter here the name of the sender whose mail you wish to read. You can specify the login name or the mail path of the user who has sent the mail. You will find the login name of the sender in the second display column of the mail list.

If you leave the field blank, the mails of all senders will be displayed.

Patterns for subjects

Enter here the subject of the mail you wish to have displayed. If the sender has specified the subject of the mail, you will see it in the last display column of the mail list.

If you leave the field blank, mails on any subject will be displayed.

» Press [F3] (SAVE) to store the search pattern you have entered.

The *Search patterns* form remains open so that you can change quickly between the display list and the form if you want to change the mail display criteria again.

» Press [F6] (CANCEL) to close the *Search patterns* form.

4.3.3 Sending mail

By selecting the *Send Mail* item in the *Mail Services* menu, you open the *Send Mail* form. You can use this form to send messages whose text you take from a file or for which you produce new text.

The form contains the following fields:

Username:

You can specify one or more addresses here. Multiple entries are separated by spaces, tabs or new line characters. A mailgroup may be entered here instead of an address. The message is then sent to all recipients defined under the mailgroup.

Hostname:

The mail is sent to this computer. Specify the name of the computer as it is known in the network.

Filename:

If you enter one or more file names in this field, the appropriate file(s) is/are sent as mail. Such files must already exist.

Subject:

You enter the subject of the message in this field. The subject is displayed to the recipient on arrival of the message.

Message:

Only if you do not specify a file to be sent can you enter the text of your message directly in this field. If you have specified a file to be sent and you also enter text in the *Message* field, the latter is ignored and only the file will be sent.

When you press [F2] (CHOICES), the *Username:* field displays all users and mailgroups. Mailgroups are characterized by a preceding asterisk (*). With the same key, the *File:* field displays an overview of your files and file folders.

The mail is sent like all forms by pressing [F3] (SAVE).

4.3.4 Redirecting mail

FACE allows you to redirect your mail. You can utilize this facility, for example, when you go on holiday and colleagues need to handle your mail, or if you sometimes work under another login name on a computer; incoming mail can be redirected to another login name. If you wish to make use of this service, you should note the following:

- You must not have any outstanding new mail. So you should first use the *Read New Mail* command to look through your mail, and delete or move all the messages so that none remain.
- If you have deleted mail, it is advisable to *update* (Command Menu) the display of a mail menu so that you may see any changes that have not yet been included.

Then select *Redirect Mail* from the *Mail Services* menu. *Redirect Mail* opens a menu containing three items. These allow you to determine who will receive your mail on your behalf.

The menu items initiate the following actions:

Show Recipients	Displays a list of the alternate recipients, that
------------------------	---

	you have created using <i>Add Recipient</i> .
Add Recipient	Opens a form containing two fields, in which you enter the user name (login name) and the host name (computer name known in the network) of an alternate recipient whom you wish to receive your mail.
Delete Recipients	Opens a list of all the alternate recipients you have entered. You can use function key [F2] (MARK) to mark one or more alternate recipients in this list. Pressing function key [F3] (ENTER) will then delete all the alternate recipients you have marked in the list. When you wish to cancel the redirection of your mail, you must use <i>Delete Recipients</i> to delete all the alternate recipients.

Table 34: Options for the 'Redirect Mail' menu

4.3.5 Defining mailgroups

A mailgroup provides a grouping of mail addresses. By specifying a mailgroup instead of an individual username, you send mail to a fixed target group without having to enter the addressees individually each time. But you can also use a mailgroup to store an individual address for electronic mail which you require frequently or which is extremely complicated. Mailgroups can be created (globally) by the system administrator for all users and (privately) by you for your own use. You can use the *Mailgroups* menu item to list the global and private mailgroups. You can only add or delete private mailgroups.

You use the item *Mailgroups* in the *Mail Services* menu to open the *Mailgroups* menu. The items this contains and the actions you can execute with them are described in the following.

Show Mailgroups	Opens a further menu in which the following three options can be activated: <i>Private Mailgroups</i> , <i>Global Mailgroups</i> and <i>All Mailgroups</i> . Each of these options opens a text frame listing the corresponding mailgroups.
Add Private Mailgroup	Opens a form displaying two fields: Groupname: Here you specify what the mailgroup is (to be) called. Members: Enter one or more login names (separated by spaces). These users (login names) can now be addressed under the specified groupname. Pressing [F7] (CHOICES) gives you a list of all possible mail recipients.
Delete Private Mailgroups	You can use function key [F2] (MARK) to mark one or more mailgroups in this list. Pressing [F3] (ENTER) deletes all the mailgroups

| marked in the list.
Table 35: Options for the 'Mailgroups' menu

4.4 The SINIX system

The shell is the user interface with the operating system kernel. For you as a user, this means that you can only issue commands to the operating system through the shell. You must therefore communicate with the shell, i.e. you must use a language that the shell understands. *FACE* largely relieves you of the need to learn this language.

If your system administrator has given you the facility to access the SINIX shell, the entry *SINIX* will appear in your *FACE* menu. If you do not have shell authorization, this entry will not appear, and the functions described in this section will not be available to you.

Selecting *SINIX* from the *FACE* menu is another way of accessing the SINIX shell. This creates a subshell that takes up the entire screen.

Your screen will then look like this:

```
To return, type 'exit' or control-d
You are in /home/face
SINIX:
```

At the top of the screen the name of the current directory is displayed, along with the following directions:

```
To return, type `exit` or control-d
```

SINIX:, the prompt for the subshell, appears on the screen. To return to *FACE*, type *exit* and press [RETURN], or alternatively press the key combination [CTRL] [d].

You can run a program or execute commands in the subshell, but when you return to *FACE*, the subshell is terminated, as are the processes running within the subshell.

For further information on operating and using the SINIX shell, refer to the "SINIX V5.41 User's Guide", chapter "The shell".

4.4.1 Using SINIX commands from your FACE main menu

It is not necessary to select *SINIX* from the *FACE* menu to use SINIX commands. A SINIX command can equally well be executed from the *FACE* command line by preceding it with an exclamation mark (!).

If you have not been given SINIX shell privileges under *FACE*, you will not be able to use the exclamation mark (!) in the command line to execute SINIX commands. Moreover, you will be unable to add personal programs to your menu system, or modify them. Accordingly, the *Add Programs* and *Modify Programs* menu items will be inactive.

For a detailed description of all SINIX commands, refer to the manuals "SINIX V5.41, Commands, Volume 1" and "Volume 2".

4.4.2 Using an executable file

There are many files on your system that are executable, such as SINIX commands or shell scripts. An executable file (also called a "binary" file), contains instructions to the system. It is possible to copy an executable file into one of your file folders. If you do so, the description of the file is *Executable*. Shell scripts cannot always be recognized as *Executable* by *FACE*, but such files can nevertheless be executed using the *Execute* function in the *Action* menu.

The description *Executable* is supplied automatically by *FACE*. This is one way of distinguishing the executable files from the nonexecutable files. The other method is to display files in the long form in a menu. It is therefore advisable not to redescribe such files. If you do choose to redescribe an executable file, the only way you can then identify it as

executable in a menu is to set the value of the *Display Format* fields in the *Office Functions* form to *long form* so that its type will also be displayed.

Once you have copied an executable file to your filecabinet, you can use it by simply selecting it.

Copying an executable file

The following exercise shows you how to copy and use an executable file. You can only do this exercise if you are authorized to change to the SINIX shell.

» Wechseln Sie in die SINIX-Shell und geben Sie ein:

```
cp /usr/bin/cal $HOME
```

» Press [RETURN].

» Now open the */home/face* file folder.

You will see the file *cal* listed and described as *Executable*.

Files copied from the SINIX system into your *FACE* main menu may not have the same permissions you have defined in the *Preferences* form. You may want to use the *Change object attributes* function in the *Action* menu to check the *cal* file permissions to make sure the read, write, and run/search permissions for you (the owner) are set to *yes*.

» To run *cal*, position the cursor on the file name and press [F3] (ENTER).

The calendar now appears on the screen, displaying the current month.

This copying function is probably most useful when another user gives you a copy of a program that is not a part of the SINIX system.

4.4.3 Running a shell script

Under SINIX, there is another type of file that your system can run. When a standard file is used in this way, it is called a "shell script". This is a file containing one or more lines of text. Each text line contains an instruction in the form of a command. The shell reads the file and interprets these commands. Shell scripts cannot always be recognized as *Executable* by *FACE*, but such files can nevertheless be executed by means of the *Execute* function in the *Action* menu.

Once the file is created, permissions need to be changed on it to make it executable. Even when the permissions are changed, *FACE* will continue to think that this is a standard file, not an executable file.

In the following example, you will create a simple shell script. Then you will change the permissions for the file containing the shell script to include run capability, and use the *run* command or the *Execute* function in the *Action* menu to execute it.

» In your */home/face* file folder, use an editor to create a standard file called *test.sh* and enter these lines into it.

```
echo What is your name?
read name
echo Hello $name.
echo I am a shell script and now I am finished.
```

» Save the file and quit the editor. Notice that *test.sh* is now listed in your */home/face* menu as a *Standard file*.

» Position the cursor on the entry *test.sh* in the */home/face* menu.

» Press [F2] to mark this entry, and then press [F3] to reach the *Action* menu.

» Select *Change object attributes*.

» Give yourself (*Owner*) run permission (*Run/Search Permissions yes*) for this file.

When you return to the */home/face* file folder, you will notice no change in the description.

- » Mark *test.sh* again by pressing [F2], and then press [F3] to reach the *Action* menu.
- » Select *Execute*.
The screen will clear, and the shell script *test.sh* will run.
- » In response to the prompt *What is your name?*, type your name and press [RETURN].
- » When the shell script is finished, press [RETURN] to return to *FACE*.
When you store a shell script in your *FACE* main menu or filecabinet in the way just described, you must use the *Execute* function in the *Action* menu to run it.

4.4.4 Suspending a program

When you are working with a program such as an editor, it may be useful to temporarily exit (or "suspend") this program in order to provide other files with specific information with the aid of *FACE*.

The *facesuspend* command is available for this purpose. However, it can only be used in programs that have a built-in method to escape to the SINIX shell, as *vi* does. If you try using it in a program that does not have such a built-in method, the *facesuspend* will be ignored. You use the *frm-mgmt* command to specify the file to which you wish to return. The following exercise assumes that the editor *vi* is your default editor. In this exercise you will practice suspending a few files while you are editing them with *vi*.

- » Navigate to the */home/face* file folder and create three new files called *facetest1*, *facetest2* and *facetest3*.
- » To enter text in the individual files, you must mark the files, change to the *Action* menu, and select *Open files*.
You can now enter text into these three files in turn without leaving your editor.
- » Enter (a different) text in each file and save each file by pressing [ESC]:w.
- » Now enter [ESC]:n to change to the next file each time. Close the last file by pressing [ESC]:wq.
This simultaneously terminates your editor session. The three new files are now listed in your */home/face* folder.
- » Select the file *facetest1*.
- » Now suppose you need information from the file *facetest2*. Instead of typing [ESC]:wq to save *facetest1* and quit the editor *vi*, simply type [ESC]:!*facesuspend* and press [RETURN].
Repeat the above steps to open and then suspend *facetest3*.

There are now three files opened and suspended in your work area, although none is visible on your screen at this point. You are back in your *FACE* main menu, and the */home/face* frame is the active one. You can now choose between the opened files as required, and edit them.

Returning to suspended files

In this exercise you will learn how to use the *frm-mgmt* command to list your suspended files and choose which one you want to return to.

- » Execute *frm-mgmt* from the *Command Menu* or the command line.
This opens the *Frame Management* menu.
- » Select *list* from the *Frame Management* menu.
A menu listing the open frames will appear on the screen.
- » Select *facetest2*.
The following message appears on the screen: You are returning to a suspended activity. Press [RETURN] to return to the *facetest2* file.
The cursor will be automatically reset to the position it was in when you suspended the

file. You can now continue to edit the file, and then either save the file and quit the editor, or you can suspend the file again.

- » Press [CTRL] {j}, type *exit* and attempt to exit from *FACE* by pressing [RETURN]. You cannot exit from *FACE* because the */home/face* frame and other frames are open. Instead, you are returned to the */home/face* frame.
- » Using [ESC]:*q* or [ESC]:*wq*, and then pressing [RETURN], close each of the *vi* sessions still open.

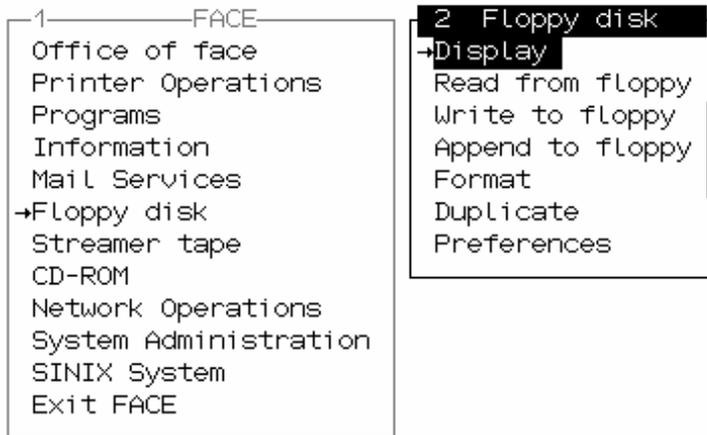
Commands or programs with which you have accessed suspended files are listed by their full path name in the *frm-mgmt* list.

4.5 Working with floppy disks

If you want to be able to exchange your files with other users who are not working on your computer or in your computer network, or if you want to guarantee the availability of your data following a possible system error, you should store the files/data on external data media, on floppy disks, e.g. when the quantities of data are relatively small.

This section summarizes the procedures for working with floppy disks.

The *FACE* menu includes the item *Floppy disk* for working with floppy disks. Selecting this item will give you the following submenu:



Move to an item with arrow keys and press ENTER to select the item.

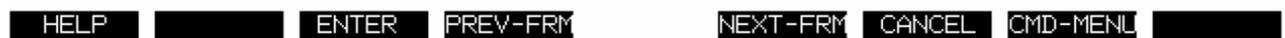


Figure 13: The 'Floppy disk' menu

You have a choice of functions for doing the following:

- formatting floppy disks
- defining the output format of archive files
- selecting a floppy disk drive if your system has more than one available
- writing files to a floppy disk or appending further files to existing files on a floppy disk
- displaying the contents of a floppy disk
- reading files from a floppy disk
- duplicating a floppy disk as often as you require

The *Floppy disk* menu item is not available on some systems where the floppy disk drives have no write capability.

If you want to save your files and file folders on floppy disk, you should note the following:

- You must use a formatted floppy disk.
- You must define the output format for your archive files.
- You must decide whether you want to rewrite the floppy disk, or simply append new files

to the existing files.

- You must ensure that the size of the files to be written does not exceed the capacity of a floppy disk.

These points are described in detail in the following.

4.5.1 Formatting a floppy disk

If you are not using preformatted floppy disks, you must format your floppy disk. You do this using the item *Format* in the *Floppy disk* menu. Proceed as follows:

- » Remove the write protection, if any, from the floppy disk and insert the disk into the appropriate drive.
- » Select *Format* from the *Floppy disk* menu.

The *Floppy Capacity* form will now appear, in which you must specify how you wish to format the floppy disk. Press [F2] (CHOICES) to receive the possible values for your current drive. You can only use the capacities offered to you under [F2] (CHOICES). The following frequently used floppy disk formats are possible:

Size	tpi	Write density	Formatted capacity
3 1/2"	135	DD	720 Kbytes
3 1/2"	135	HD	1440 Kbytes
5 1/4"	96	DD	720 Kbytes
5 1/4"	96	HD	1200 Kbytes

Table 36: Floppy disk storage capacities

Warning:

Take care not to select the wrong disk format when formatting, e.g. writing 1.4 Mbytes to a 3 1/2" DD floppy disk. *FACE* does not output an error message during formatting, so incorrect formatting is not detected until you try to write to the floppy disk.

- » Press [F3] (CONT) to start the formatting.
FACE displays the following in the message line while formatting is running:
Formatting in progress...

Warning:

Existing files on a floppy disk are lost when you reformat the disk.

4.5.2 Defining the output format of archive files and selecting a drive

When you save files and directories to floppy disk, these are written to what is known as an "archive". This archive has a particular format, depending on whether *FACE* has used the SINIX command *tar* or *cpio* for saving. You can define the format in the *Floppy disk* menu with the aid of the *Preferences* item as follows:

- » Select *Preferences* from the *Floppy disk* menu.
The *Floppy Preferences* form appears in the work area, specifying the drive and the output

format. You can now select a new output format and the disk drive you wish to use if your system has more than one. If your system only has one disk drive you cannot make any changes in the *Drive* field.

- » Choose between *tar* and *cpio* as the output format by pressing [F2] (CHOICES).
- » You can specify the disk drive via [F2] (CHOICES) if your system has more than one. The alias names displayed for the drives differ depending on which system you are using.
- » Save the selected drive and the output format by pressing [F3] (SAVE).
The *Preferences* form closes.

Whether you use *tar* format or *cpio* format for saving depends on what you want to do with it. If you are saving for your own personal use, you can use the *tar* format. But if you want to exchange your data with a user on another computer who is using a different UNIX system, you should always use the *cpio* format for reasons of compatibility.

4.5.3 Writing to floppy disk

You can write both individual files and also file folders to floppy disk. When you write a file folder to floppy disk, all the file folders and files it contains are also written. Proceed as follows:

- » Select *Write to floppy* from the *Floppy disk* menu.
A frame displaying the contents of the currently open file folder appears in the work area. You can open a new folder using the function keys [F4] (OPEN-FOL) and [F5] (CLOS-FOL). You must select the files and folders that you want to write to floppy disk by using the arrow keys and [F2] (MARK).
- » Position the cursor on the relevant file or folder and press [F2].
The file or folder is marked, for example, by an asterisk preceding the name. You can only mark files within a folder.
- » Start the floppy disk action by pressing [F3] (ENTER).
A dialog frame opens in which *FACE* checks whether you have removed the floppy disk's write protection and whether the correct floppy disk is inserted in the drive.
- » Confirm that you are ready to continue by pressing [F3] (CONT). The write operation is now started.
FACE displays the following in the message line while the write operation is running:
Writing to disk...
When the write operation has finished, you must close the dialog frame and also the frame with the *Write to floppy* item by pressing [F6] (CANCEL).

Warning:

Files written to the floppy disk earlier are lost when you use the *Write to floppy* item to write new files to the floppy disk.

Appending files to a floppy disk

If your floppy disk already contains files that you want to retain and you want to add new files to this floppy disk, you should proceed as follows:

- » Select *Append to Floppy* from the *Floppy disk* menu.
A frame displaying the contents of the currently open file folder appears in the work area. You can open a new folder using the function keys [F4] (OPEN-FOL) and [F5] (CLOS-FOL). You must select the files and file folders that you want to write to floppy

- disk by using [F2] (MARK).
- » Position the cursor on the relevant file or folder and press [F2] (MARK).
The file or folder is marked, for example, by an asterisk preceding the name.
 - » Start the floppy disk action by pressing [F3] (ENTER).
A dialog frame opens in which *FACE* checks whether you have removed the floppy disk's write protection and whether the correct floppy disk is inserted in the drive.
 - » Confirm that you are ready to continue by pressing [F3] (CONT). The write operation is now started. *FACE* displays the following in the message line while the write operation is running:
Writing to floppy...
 - » When the write operation has finished, you must close the dialog frame and also the frame with the *Append to floppy* item.

4.5.4 Displaying the contents of a floppy disk

If you want to check which files and file folders your floppy disk contains, you can have the contents of the floppy disk displayed without reading files in.

- » Insert the relevant floppy disk correctly into the drive.
- » Select *Display* from the *Floppy disk* menu.
- » A dialog frame opens in which you are asked whether the correct floppy disk is inserted in the drive. Start the floppy disk action by pressing [F3] (CONT).

A frame displaying the contents of the floppy disk appears in the work area. The following information is output for each file or file folder: permissions set, group and user numbers, size of file in bytes, date of latest modification, and name of the file or file folder.

4.5.5 Reading files from floppy disk

You can read files and file folders from a floppy disk in two ways: you can either read the contents of the entire floppy disk, or you can read only specific files and file folders. Both methods are described in the following.

Reading contents of an entire floppy disk

As a nonprivileged *FACE* user without shell authorization, you can only write files and file folders that you read from floppy disk into an empty file folder. You must therefore create a new file folder, into which you write the contents of the floppy disk.

- » Select *Read from floppy* from the *Floppy disk* menu.
- In the work area, a form appears in which you can use the arrow keys to select whether you want to read the contents of the entire floppy disk or only parts thereof. If you have no shell authorization, you can only write to empty file folders.
- » Select *Read all* and press [F3] (ENTER).
A frame displaying the contents of the currently open file folder appears in the work area. You can select and open the destination file folder, to which you want to write the floppy disk contents, using the function keys [F4] (OPEN-FOL) and [F5] (CLOS-FOL).
 - » Start the read operation by pressing [F3] (READ).
FACE asks whether the floppy disk is already inserted in the drive.
 - » Confirm that this is the case and start the read operation by pressing [F3] (CONT).
The message line displays the following during the read operation:
Reading from floppy...

When the read operation has finished, you must close the frames *Read from floppy*:

destination folder and *Read from floppy* by pressing [F6] (CANCEL).

Selective reading of floppy disk contents

As a nonprivileged *FACE* user without shell authorization, you can only write files and file folders that you read from floppy disk into an empty file folder. You must therefore create a new file folder, into which you can have the contents of the floppy disk written.

- » Select *Read from floppy* from the *Floppy disk* menu.
In the work area, a form appears in which you can use the arrow keys to select whether you want to read the contents of the entire floppy disk or only parts thereof.
- » Select the *Read selective* option and press [F3] (ENTER).
FACE asks whether the floppy disk is already inserted in the drive.
- » Start the read operation by pressing [F3] (CONT).
A frame displaying the contents of your floppy disk appears in the work area. Select the files and file folders to be read:
- » Position the cursor on the relevant file or folder using the arrow keys and mark the data object by pressing [F2] (MARK).
- » Then press [F3] (ENTER).
A frame displaying the contents of the currently open file folder appears in the work area. You can select and open the destination file folder, to which you want to write the floppy disk contents, using the function keys [F4] (OPEN-FOL) and [F5] (CLOS-FOL). If you have no shell authorization, you can only write to empty file folders.
- » Start the read operation by pressing [F3] (READ).
FACE displays the following in the message line during the read operation:

Reading from floppy...

When the read operation has finished, you must close the *Read from floppy* frame by pressing [F6] (CANCEL).

Compatibility with other menu systems

In *FACE*, you can continue to use floppy disks written under other menu systems, such as Collage, with no problems. You can, for example, display or read the contents of such floppy disks as if the disks had been written under *FACE*.

Floppy disks written under *FACE* can be used in other menu systems, e.g. Collage, only in expert mode, i.e. on the shell level.

4.5.6 Duplicating floppy disks

If you need to make a one-to-one copy of a floppy disk, you can do this via the *Duplicate* function in the *Floppy disk* menu. All you require is the source floppy you wish to copy and a formatted floppy on which to store the copy.

- » In the *Floppy disk* menu select *Duplicate*.
The *Source floppy* frame appears in the work area, asking you whether the source floppy is loaded in the appropriate drive.
- » Insert the source floppy into the drive and press [F3] (CONT).
The message `Reading from floppy...` appears in the work area.
FACE now reads in the data from the floppy and stores a temporary copy of the data on the hard disk.
Once the data from the source floppy has been read in, a message appears in the *Destination floppy* frame asking you to insert the floppy to which the data is to be copied.
- » Remove the source floppy from the drive and insert the destination floppy. Make sure

- that the write protection tab has been removed from the destination floppy.
- » Press [F3] (CONT) to start the write action.
The message `Writing to disk...` appears in the work area.
Once the copy has been created on the destination floppy, a text frame appears asking you to insert another destination floppy. This enables you to create as many copies of a floppy as you require, without first having to read in the source floppy each time.
 - » If you want to make another copy, insert a new destination floppy in the drive and press [F3] (CONT).
 - » If you do not require further copies, close the text frame by pressing [F6] (CANCEL).

Note:

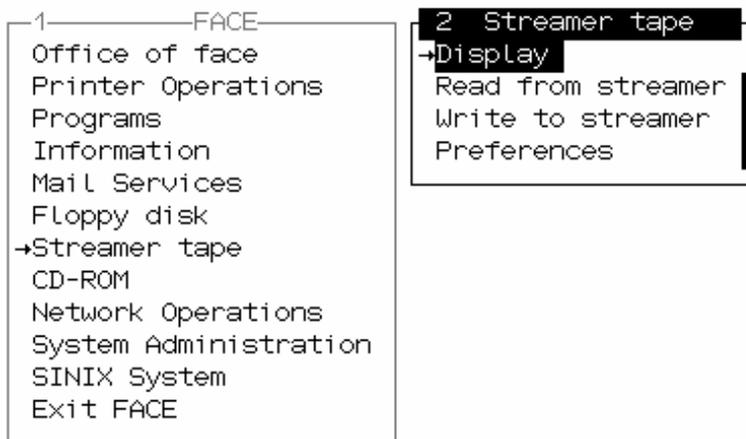
Make sure that the destination floppy is correctly formatted and that it has at least the same capacity as the source floppy.

4.6 Working with streamer tapes

If you want to be able to exchange your files with other users who are not working on your computer or in your computer network, or if you want to guarantee the availability of your data following a possible system error, you must store the files/data on external data media. You should use magnetic tape streamer cartridges when relatively large quantities of data are involved.

This section summarizes the procedures for working with streamer tapes.

The *FACE* menu includes the item *Streamer tape*. Selecting this menu item produces the following submenu:



Move to an item with arrow keys and press ENTER to select the item.



Figure 14: The 'Streamer tape' menu

You have a choice of functions for performing the following:

- selecting a streamer tape drive if your system has more than one available
- defining the output format of archive files
- writing files to a streamer tape
- displaying the contents of a streamer tape
- reading files from a streamer tape

4.6.1 Defining the output format of archive files and selecting a drive

When you save files and directories to a streamer tape, these are written to what is known as an "archive". This archive has a particular format, depending on whether *FACE* has used the SINIX command *tar* or *cpio* for saving. You can define the format in the *Streamer tape* menu with the aid of the *Preferences* item. You also have here the option of selecting a specific tape drive if your system has more than one available, e.g. a streamer tape drive

and an Exabyte drive.

- » Select *Preferences* from the *Streamer tape* menu.
The *Streamer tape Preferences* form appears in the work area, specifying the drive and the output format. You can now select a new output format and the tape drive you wish to use if your system has more than one. If your system only has one tape drive you cannot make any changes in the *Drive* field.
- » Choose between *tar* and *cpio* as the output format by pressing [F2] (CHOICES).
- » You can specify the drive via [F2] (CHOICES) if your system has more than one tape drive. The alias names displayed for the drives differ depending on the hardware you are using.
- » Save the selected drive and the output format by pressing [F3] (SAVE).
The *Preferences* form closes.

You can only read your files and directories again if you use the same format for reading a streamer tape as you used to write it: streamer tapes written in *tar* format can only be read with *tar*, streamer tapes in *cpio* format can only be read with *cpio*. So you should label each streamer tape to indicate which format (*tar* format or *cpio* format) they were written in. Whether you use *tar* format or *cpio* format for saving depends on what you want to do with it. If you are saving for your own personal use, you can use the *tar* format. But if you want to exchange your data with a user on another system who is using a different UNIX system, you should always use the *cpio* format for reasons of compatibility.

4.6.2 Writing to a streamer tape

You can write both individual files and also file folders to a streamer tape. When you write a file folder to a streamer tape, all the file folders and files it contains are also written. Proceed as follows:

- » Select *Write to streamer* from the *Streamer tape* menu.
A frame displaying the contents of the currently open folder appears in the work area. You can open a new folder using the function keys [F4] (OPEN-FOL) and [F5] (CLOS-FOL). You must select the files and folders that you want to write to a streamer tape by using [F2] (MARK).
- » Position the cursor on the relevant file or file folder and press [F2]. The file or folder is marked, for example, by an asterisk preceding the name.
- » Start the streamer action by pressing [F3] (ENTER).
A dialog frame opens in which *FACE* checks whether you have removed the streamer tape's write protection and whether the correct streamer tape is inserted in the drive.
- » Confirm your readiness to continue by pressing [F3] (CONT). The write operation is now started.

FACE displays the following in the message line while the write operation is running:

```
Writing to cassette tape...
```

When the write operation has finished, you must close the dialog frame as well as the frame with the *Write to streamer* item by pressing [F6] (CANCEL).

You can only write to streamer tapes with a single access. It is not possible, as it is through the *Append to floppy* item in the *Floppy disk* menu, to add further files to existing files on the volume.

Warning:

Files written to the streamer tape earlier are lost when you use the *Write to streamer* item

to write new files to the streamer tape.

4.6.3 Displaying the contents of a streamer tape

If you want to check which files and file folders your streamer tape contains, you can have the contents of the streamer tape displayed without reading files in.

- » Insert the relevant streamer tape correctly into the drive.
- » Select *Display* from the *Streamer tape* menu.
- » A dialog frame opens in which you are asked whether the correct streamer tape is inserted in the drive. Start the streamer action by pressing [F3] (CONT).

A frame displaying the contents of the streamer tape appears in the work area. The following information is output for each file or folder: permissions set, group and user numbers, size of file in bytes, date of latest modification, and name of the file or file folder.

4.6.4 Reading files from a streamer tape

If you want to read files and file folders from a streamer tape, you can do this in two ways. You can either read the contents of the entire streamer tape, or you can read only specific files and file folders. Both methods are described in the following.

You must ensure that for *Output Format* you have set the format corresponding to the streamer tape format (*tar* or *cpio* format) .

Reading contents of the entire streamer tape

As a non-privileged *FACE* user without shell authorization, you can only write files and file folders that you read from a streamer tape into an empty file folder. You must therefore create a new file folder, into which you write the contents of the streamer tape.

- » Select *Read from streamer* from the *Streamer tape* menu.

In the work area, a form appears in which you can use the arrow keys to select whether you want to read the contents of the entire streamer tape or only parts thereof.

- » Select the *Read all* option and press [F3] (ENTER).
A frame displaying the contents of the currently open file folder appears in the work area. You can select and open the destination file folder, to which you want to write the streamer tape contents, by pressing the function keys [F4] (OPEN-FOL) and [F5] (CLOS-FOL).
- » Start the read operation by pressing [F3] (READ).
FACE asks whether the streamer tape is already inserted in the drive.
- » Start the read operation by pressing [F3] (CONT).
The message line displays the following during the read operation:

```
Reading from cassette tape...
```

When the read operation has finished, you must close the frames *Read from streamer: destination folder* and *Read from streamer* by pressing [F6] (CANCEL).

Selective reading of streamer tape contents

As a non-privileged *FACE* user without shell authorization, you can only write files and file folders that you read from a streamer tape into an empty file folder. You must therefore create a new file folder, into which you can have the contents of the streamer tape written.

- » Select *Read from streamer* from the *Streamer tape* menu.

In the work area, a form appears in which you can use the arrow keys to select whether you want to read the contents of the entire streamer tape or only parts thereof.

- » Select the *Read selective* option and press [F3] (ENTER).
FACE asks whether the streamer tape is already inserted in the drive.
 - » Start the read operation by pressing [F3] (CONT).
A frame displaying the contents of your streamer tape appears in the work area. Select the files and file folders to be read:
 - » Position the cursor on the relevant file or folder using the arrow keys and mark the data object by pressing [F2] (MARK). You can only mark files within one file folder.
 - » Then press [F3] (ENTER).
A frame displaying the contents of the currently open file folder appears in the work area. You can select and open the destination file folder, to which you want to write the streamer tape contents, by means of the function keys [F4] (OPEN-FOL) and [F5] (CLOS-FOL). If you have no shell authorization, you can only write to empty file folders.
 - » Start the read operation by pressing [F3] (READ).
FACE displays the following in the message line during the read operation:
Reading from cassette tape...
- When the read operation has finished, you must close the *Read from streamer* frame by pressing [F6] (CANCEL).

4.7 Working with CD-ROMs

The optical disk media available include various optical laser disks, among them the CD-ROM (**C**ompact **D**isk **R**ead **O**nly **M**emory). The data medium used in the CD-ROM is a metal-coated plastic disk. The CD-ROM is used mainly for distributing alphanumeric and graphical information, and is characterized by a large data storage capacity (some 540 to 648 Mbytes). Access to the CD-ROM is implemented through a file system. A CD-ROM can only be used for reading data and cannot be written to by the user. The *FACE* menu includes the item *CD-ROM*. Selecting this menu item offers you a choice of the following functions for:

- preparing a CD-ROM drive for use
- mounting the file system of a CD-ROM in your own file system
- releasing a CD-ROM drive for other users in the system
- getting information about the contents of a CD-ROM

The *CD-ROM* item in the *FACE* menu is available to you only if a suitable drive is installed on your system. Check with your system administrator if necessary.

4.7.1 Preparing the CD-ROM drive

Proceed as follows to prepare a CD-ROM for use:

- » Insert the relevant CD-ROM correctly into the CD-ROM drive.
- » Select *CD-ROM* from the *FACE* main menu.

When you select this menu item, a frame containing four columns appears:

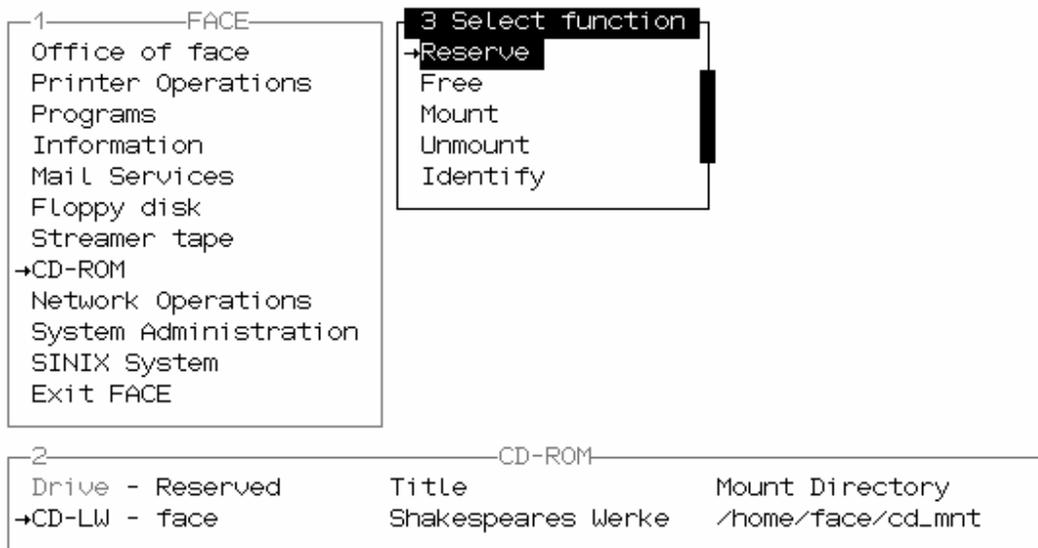
Drive	<i>Drive name</i> Either a symbolic name (e.g. CD-DR) or a path name is entered here.
Reserved	<i>Reservation state</i> An empty field indicates that the drive is free. A dash (-) means that an error preventing use occurred on addressing the drive. An asterisk (*) indicates that this drive is reserved, but not by whom. A login name indicates that the corresponding user is using the drive.
Title	<i>Volume identifier</i> A character string stored on the CD-ROM that characterizes the contents of the CD-ROM.
Mount Directory	<i>Name of directory</i> Denotes the directory to be used as mount point for the CD-ROM file tree.

Table 37: Options for the 'CD-ROM' menu

- » Now use the cursor keys in the *CD-ROM* menu to select the drive in which the desired CD-ROM is inserted. Confirm your selection by pressing [RETURN].

A frame called *Select function* then appears.

Your screen should now look like this:



Select function and press ENTER.



Figure 15: The 'CD-ROM' menu

The *Select function* frame offers you a choice of the five menu items. These are explained in the following table:

Reserve	Reserve CD-ROM drive for one user.
Free	Release CD-ROM drive for other users.
Mount	Mount CD-ROM file tree on directory.
Unmount	Unmount reserved CD-ROM file tree.
Identify	Get status messages for CD-ROM.

Table 38: Options for the 'Select function' menu

With the aid of these functions, you can prepare a CD-ROM drive for use and release it again for other users. You will learn in the following sections how to perform these actions.

4.7.2 Mounting a CD-ROM in your file system

If you want to use a CD-ROM drive, you must first reserve it. Other users are then unable to access the drive. This in no way restricts access to the mounted file tree. Proceed as follows to reserve a CD-ROM drive:

- » Select *CD-ROM* from the *FACE* main menu.
- » Now use the cursor keys in the *CD-ROM* menu to select the drive in which the desired CD-ROM is inserted. Confirm your selection by pressing [RETURN].
A frame titled *Select function* then appears.
- » Select *Reserve* from the *Select function* frame. Confirm your selection by pressing [RETURN] (ENTER). You then receive a message indicating that your reservation has been

successfully processed.

If you fail to mount the CD-ROM's file system within 30 minutes, your reservation will lapse.

Now you should mount the CD-ROM's file tree in your own file system. To do so, specify the path of a directory that will serve as the mount point for the CD-ROM file tree.

» Select *Mount* from the *Select function* frame. Confirm your selection by pressing [RETURN] (ENTER).

The *Mount Drive* form appears.

The *\$HOME/login/cd_mnt* directory is the default mount point. You can use this default by pressing [RETURN], or specify another directory of your own, subject to the following restrictions:

- The directory that you now make the mount point must be empty.
- The path may only lead to directories of which you are the owner and for which you have write permission.
- The CD-ROM drive that you want to mount in the file system must not have been reserved by another user.

If the specified directory does not exist, it is created if required.

You can now access the CD-ROM's file system. You do this by using the functions for file operations. For further information, refer to the chapter "Working with files and file folders". Mounting a CD-ROM without first reserving it results in a de facto reservation, invisible to you, which is released again on removing the CD-ROM.

Warning:

Remember that you are not able to write any files to a CD-ROM and that you cannot therefore modify files contained in the CD-ROM's file system.

4.7.3 Releasing a CD-ROM for other users

When you no longer require a CD-ROM drive, you release it again for other users. You do this by using the functions *Unmount* and *Free* in the *Select function* menu.

When you want to unmount a CD-ROM's file tree again, you should perform the following steps:

» Use the cursor keys in the *CD-ROM* menu to select the drive in which the desired CD-ROM is inserted. Confirm your selection by pressing [RETURN].

A frame titled *Select function* then appears.

» Select *Unmount* from the *Select function* frame. Confirm your selection by pressing [RETURN] (ENTER).

The file tree is thus unmounted, but the drive is not yet released for reservation by other users. If you did not mount the file system yourself, you cannot unmount it. If you nevertheless attempt to do so, you will receive an appropriate error message. You can only release drives that you have previously reserved.

Next you should cancel the reservation of the CD-ROM drive as follows:

» Use the cursor keys in the *CD-ROM* menu to select the drive in which the desired CD-ROM is inserted. Confirm your selection by pressing [RETURN].

A frame titled *Select function* then appears.

» Select *Free* from the *Select function* frame. Confirm your selection by pressing [RETURN] (ENTER).

You can also cancel a reservation if you have not yet unmounted the CD-ROM's file system. In this way, the drive can be reserved again for other users immediately after the file system is unmounted.

4.7.4 Getting information about a CD-ROM

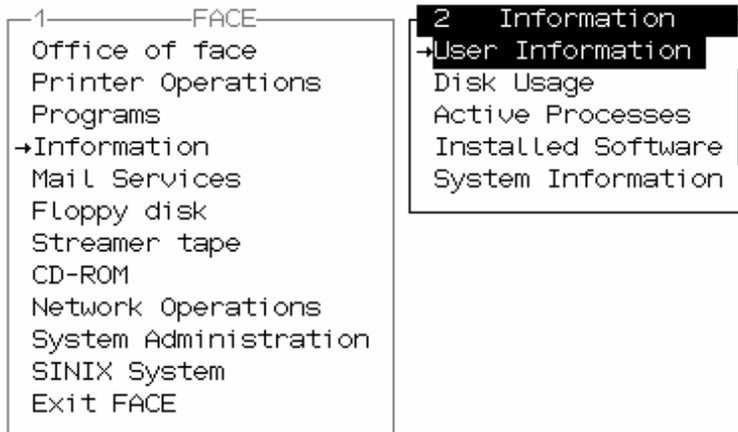
The *Select function* item contains the *Identify* option. This function enables you to see the following information about the CD-ROM in the selected drive:

- status
- CD-ROM title
- type of file system

4.8 Information

To enable you to plan and coordinate your work on the system, you need detailed information about what is happening on the system.

Selecting the item *Information* produces the following submenu:



Move to an item with arrow keys and press ENTER to select the item.



Figure 16: The 'Information' menu

You can call up information on the following areas via the *Information* menu item:

- login names entered on the system and active users
- hard disk usage and free storage space
- currently active processes
- software packages installed
- hardware and installed operating system

4.8.1 Calling user information

The menu you open via *User Information* in the *Information* menu contains the items *All Users* and *Active Users*, which display the different types of information described below:

All Users

Information about all login names entered on the system. The following data is output for each login name:

```

USERID
  Login name
  
```

GROUP User group to which the login name belongs
 PARTITION
 Path name of the associated \$HOME directory
 LOGINSHELL
 Program that is started on calling this login name

Active Users

Information about all active users, i.e. all users currently logged in to the system. The information is output in the following columns:

USERID
 Login name
 TTY Terminal via which the connection was called
 LOGINTIME
 Time of login to the system

4.8.2 Disk usage

The *Disk Usage* item in the *Information* menu opens a menu that allows you to check the usage level of your system.

Free Disk Space On File Systems

This command provides information about the usage level of the file systems. A list is displayed in the main *Information* frame:

FILE SYSTEM
 Name of the file system
 DISK SPACE
 Free disk space and total existing disk space (both as Mbyte and percentage values).

Space Occupied By Own Files

This command displays how much storage space (in Kbytes) your documents occupy in your home directory. If you have a large number of files in your home directory, this command will take some time to execute. You can interrupt it with [CTRL] [c].

4.8.3 Displaying active processes

The *Active Processes* item in the *Information* menu also opens a menu containing two entries that provide information about currently active processes.

Own Processes

This command shows you which active processes are assigned to your login name. A list containing the following columns is displayed in the text frame:

USER Login name of the process owner
 PID Process ID
 PPID Process ID of the parent process
 STIME Start time of the process
 TTY Terminal that is controlling the process. Where processes have no controlling

terminal, a '?' is output.

TIME Total execution time in seconds and minutes.

COMMAND

Command name and all call arguments given when this process was called.

All Processes

This command shows all the processes that are currently active on the system. The same columns appear as for the *Own Processes* command (see above).

4.8.4 Installed software

The *Installed Software* item in the *Information* menu gives you an overview of the software packages that have been installed on your system by using the SINIX command `pkgadd`. Each line contains information about one software package. The lefthand column gives the short name of the product, the righthand column a brief description.

When you select a software package by pressing `[RETURN]`, a text frame opens. The information displayed includes the version of the package, the installation date, and the associated files and disk storage space that these files occupy.

4.8.5 Calling system information

The *System Information* menu item in the *Information* menu displays information on the hardware you are using and on the operating system version installed on your system. You will receive a text frame containing the following:

SYSTEM NAME

Name of the operating system

NODENAME

Node name of the system in the system network

OPERATING SYSTEM RELEASE

Version number of the operating system

OPERATING SYSTEM VERSION

Revision status of the operating system version

MACHINE HARDWARE NAME

Type of machine

PROCESSOR TYPE

System processor type

4.9 Using the calculator

The *Office of face* menu in the *FACE* main menu contains the *Calculator* item, which allows you to perform arithmetical calculations.

Selecting *Calculator* produces the following form:

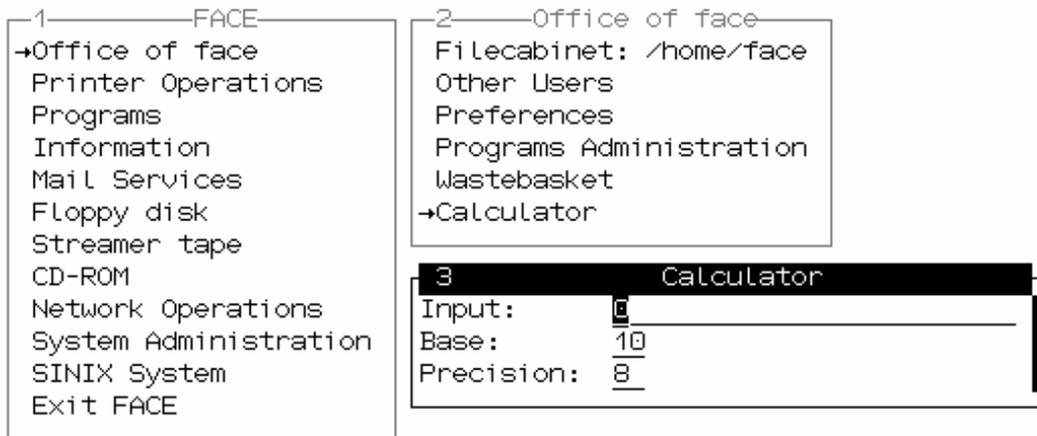


Figure 17: The 'Calculator' menu item

You can make the following entries in the individual fields:

Input:

Enter a numeric expression here. Possible inputs are:

- x + y addition
- x - y subtraction
- x * y multiplication
- x / y division
- ^ raise to a power
- s(x) sine
- c(x) cosine
- e(x) exponential function with base e
- l(x) natural logarithm
- a(x) inverse tangent
- j(n,x)
Bessel function of *n*th order

You can also link the individual operations and, for example, use brackets.

Base: Enter here the base in which the calculations are to be made. The default value is *10* for the decimal system, but you can also perform operations in the dual, octal or hexadecimal system. You must then enter your values in the chosen system, and *FACE* outputs its values likewise in this system.

Accuracy:

Here you can specify for the decimal system the maximum number of places after the decimal point which are to be displayed. The maximum accuracy here is 10 decimal places.

Conclude your input by pressing [F3] (SAVE).

The results of your calculations are output in the *Input* field in the *Calculator* form.

Note:

FACE's Calculator function uses the SINIX command *bc*. For more information on the functionality of *bc*, see "Commands Volume 1".

4.10 System administration with FACE

This menu item only appears in your *FACE* main menu if you have been given system administrator permissions. It enables you to perform the following tasks:

- administer *FACE*
- add logins
- install programs
- add printers or modems
- display user information
- display system configuration
- perform various administration tasks

Selecting the *System Administration* menu item calls the menu-driven user interface for system administration *SYSADM*. *SYSADM* is a version of the standard administration package OA&M (Operation, Administration, and Maintenance) from USL (UNIX System Laboratories, Inc.) which has been extended by Siemens Nixdorf Informationssysteme AG. For more information on the functionality and operation of *SYSADM*, see the manual "Benutzeroberfläche zur SINIX-Systemverwaltung (SYSADM)" [7].

4.10.1 Setting up or modifying the directory browser

As a *FACE* user you automatically have access to the new directory browser for completing all tasks involving files and file folders. Which directory a user can use is defined by the system administrator when setting up or modifying a *FACE* user via *SYSADM*.

When a *FACE* user is set up or modified, the additional field *Should this user use the SNI-filebrowser ?* is offered. The default value for this field is *yes*. This means that the *FACE* user works with the new directory browser and performs all file and folder functions as they are described in this manual. If you enter *no* here, you will be working with the old directory browser. In this case, functions affecting the files and folders work as described in the previous version of this manual.

5 Appendix

5.1 All function key commands

The mode of operation of the functions that you can activate with the function keys is described in the following.

CANCEL

Closes the active frame without any change to its contents. No function is activated.

CHG-KEYS

Switches between the two alternative function key assignments.

CHOICES

Displays standard values for a field of form. If there are three values or fewer, each keystroke inserts the next one of the possible values directly into the field of the form. If there are more than three possible values, a menu is opened containing these values. Pressing `[RETURN]` causes a value from the menu to be inserted into the field of the form.

CLOS-FOL

Closes the file folder that was opened with the function key OPEN-FOL. Another file folder can be opened.

CMD-MENU

Displays the multicolumn menu, allowing you to activate the commands contained in it by pressing `[RETURN]`. Refer to the section "The Command Menu" for details.

CONF confirms that you wish to continue an action.

CONTENTS

When a frame containing a help text is open, this command can display a table of contents of the subjects on which help texts are available.

DELETE

Deletes all data objects which have been specified in a corresponding form.

ENTER activates a command or the settings entered in a form. Synonymous with `[RETURN]`.

HELP opens a help text in a new frame for the frame on which the cursor is currently located. In forms the help relates to the currently active frame.

MAILBOX

Adds newly arrived mail to the list of stored mail.

MARK marks the option on which the cursor is located with an icon on the left border. Two or more options can be marked in the active file folder (or the list). The next command activated will apply to all marked options (e.g. delete, or copy from external medium).

NEXT-FRM

Makes the frame with the next higher number the current frame.

NEXTPAGE

Rolls forward one page in a frame displaying text.

OPEN_FOL

Opens the file folder on which the cursor is located in the directory browser.

OPEN-FOL

Opens the file folder on which the cursor is located. This is then available as a source

or destination file folder for write or read operations involving an external data medium.

PREV-FRM

Makes the frame with the next lower number the current frame.

PREVPAGE

Rolls back one page in a frame displaying text.

QUICK-CH

Changes more quickly from one file folder to another in the directory browser.

READCopies the data objects from external media into the specified destination directory.

REPLYOpens a *Send Mail* form. The form automatically contains the sender and subject of the open message or, if there is no open message, the message on which the cursor is located.

RESETRestores the value to the field of a form that the field had when the form was last opened.

SAVECloses the active frame. The values used in that frame are interpreted as the current values.

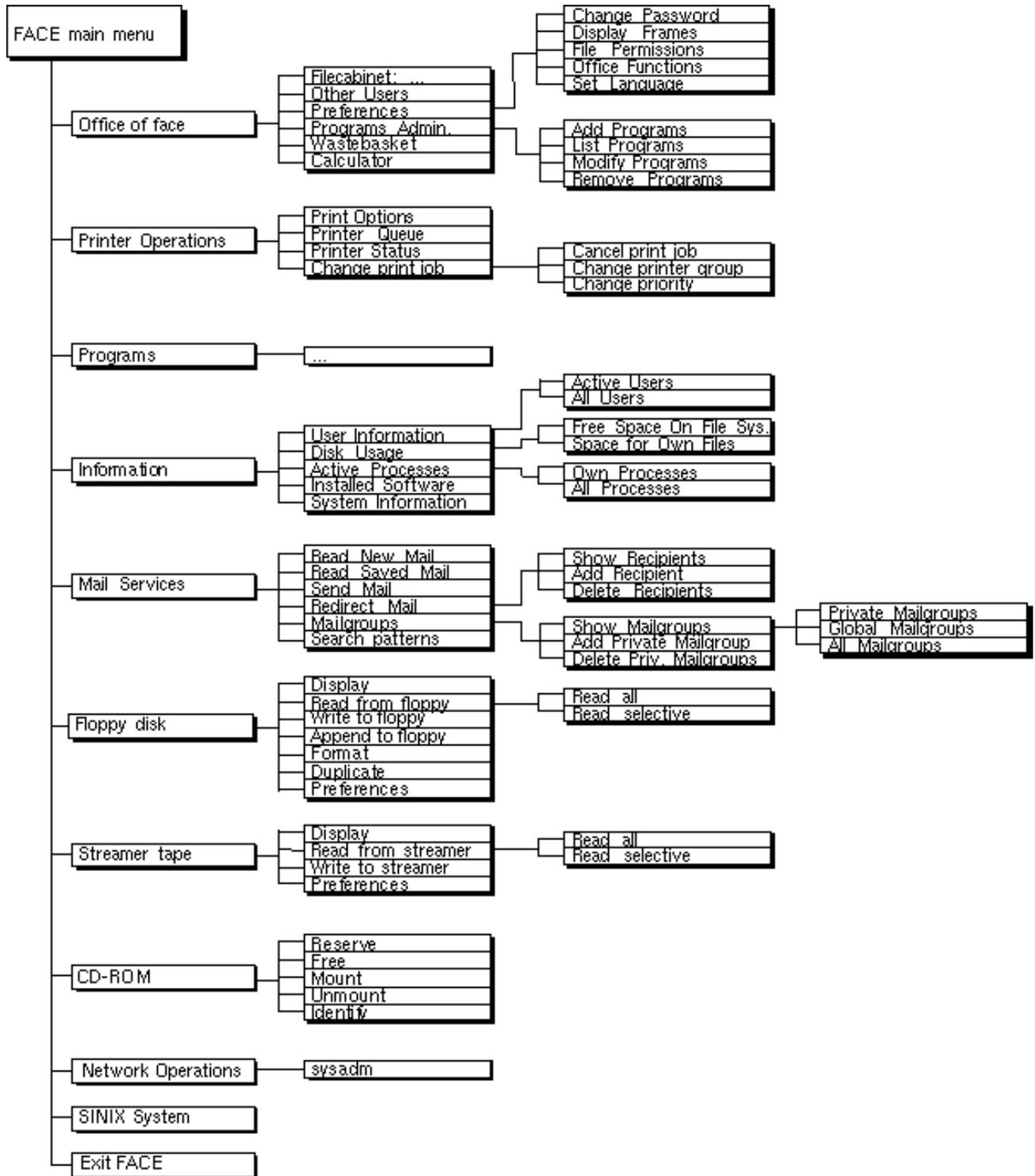
UPDATE

Updates the information relating to a frame.

WRITECopies the data objects from the specified source directory onto the external medium.

5.2 The FACE menu structure

The following illustration provides a graphical overview of the menu structure of *FACE*. Use this reference aid to get a quick overview of the facilities and options offered by *FACE*.



6 References

SINIX V5.41 User's Guide

Target group
Users

Contents
Description of the principal features of the SINIX operating system. Among the topics it covers are basics for SINIX system users, the file system, process control and the shell.

SINIX V5.41 Commands, Volume 1, A - K Reference Manual

Target group
SINIX users

Contents
The manual is a reference work describing the user commands (A-K) of the SINIX V5.41 operating system.

SINIX V5.41 Commands, Volume 2, L - Z Reference Manual

Target group
SINIX users

Contents
The manual is a reference work describing the user commands (L-Z) of the SINIX V5.41 operating system.

SINIX V5.41 Commands, Volume 3 Reference Volume Reference Manual

Target group
SINIX users

Contents
The manual is a reference work containing a master table of contents, a set of tables (regular expressions, special files, etc.), references and index.

SINIX V5.41

The FACE Interface User Guide

Target group
Users

Contents

This manual is an introduction to using SINIX with the aid of the FACE (Framed Access Command Environment) menu-driven user interface. It provides information on operating FACE and descriptions of all the FACE functions.

SINIX V5.41
System Administration Interfaces
Reference Manual

Target group
System administrators

Contents

Describes how to administer local peripherals, login accounts, the spool system and electronic mail.

The manual has been revised in line with SINIX V5.41.

SINIX V5.41
Character User Interface SYSADM
System Administrator Guide

Target group
System administrators

Contents

This manual describes the SYSADM menu interfaces and the configuration tool Config which it contains and is intended for SINIX system administrators.

SINIX V5.41 (WX200)
System Administrator's Guide

Target group
System administrators

Contents

Introduction to system administration on SINIX systems. Guide to SINIX system configuration and maintenance.

SINIX V5.4.1 (MX500)
Supplements

Target group
SINIX users, programmers, network administrators and system administrators with the appropriate knowledge base.

Contents

Supplements for various SINIX manuals dealing with the MX500.

Spool V4.0 (SINIX)
The FACE User Interface

User Guide

Target group

This manual is for users of the FACE interface of the Spool V4.0 print spooler for SINIX networks.

Contents

Describes how to print documents and schedule print jobs using Spool V4.0 via its FACE character-based interface.

Spool V4.0 (SINIX) User Guide

Target group

This manual is for users of the command line interface of the Spool V4.0 print spooler for SINIX networks.

Contents

Describes how to print documents and schedule print jobs using the command line interface of Spool V4.0.

Spool V4.0 (SINIX) Administrator Guide

Target group

This manual is for administrators of the Spool V4.0 print spooler for SINIX networks.

Contents

Provides information for administrators to set up and administer hosts, printers, forms, fonts and other components of the Spool V4.0 system.

MAXed (SINIX) User Guide

Target group

All users

Contents

This manual describes how to use the MAXed full-screen editor on all SINIX versions from V5.2 upward.

Ordering manuals

The manuals listed above and the corresponding order numbers are to be found in the *List of Publications* issued by Siemens Nixdorf Informationssysteme AG, which also tells you how to order manuals. New publications are listed in the *Druckschriften-Neuerscheinungen (New Publications)*.

You can arrange to have both of these sent to you regularly by having your name placed on the appropriate mailing list. Your local office will help you.

Index