VP DOCUMENT EDITOR

XEROX

This publication could contain technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of this publication.

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Address comment to:

Warning: As to equipment manufactured prior to October 1, 1983, such equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. As permitted by regulation, it had not been tested for compliance with the limits for Class A computing devices pursuant to Subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

As to equipment manufactured after October 1, 1983, such equipment complies with the requirements in Part 15 of FCC Rules for Class A computing devices. Such equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

DOCUMENT CREATION

XEROX

VP Series Training Guide
Version 1.1

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1. Introduction

Overview

If your organization is like most, it deals with letters, memos, reports, plans, and presentations of every size, shape, and description. Using the 6085 or 8010 workstation, these documents can be created quickly and easily.

Once the body of a document is entered, page sizes, tabs, margins, page numbers, and headings and footings can be set. Single or multiple columns, and line and paragraph spacing can be varied. (Figure 1).

Figure 1 **Page layouts**
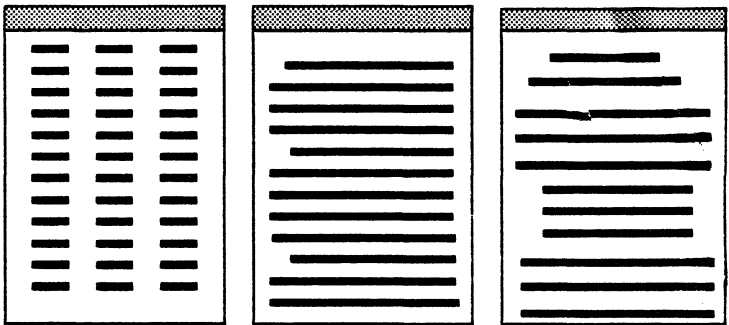
The appearance of a document can also be changed by the selection of various font options and sizes, as well as boldfacing, underlining, italicizing, and centering text.

Figure 2 illustrates some of the textual changes that can appear within a document.

Figure 2 **Textual changes**

This is an example of the standard Modern font.

This is an example of the italicized Modern font.

This is an example of the Classic font.

This is an example of the italicized Classic font.

You can make your text smaller.

You can make your text **larger.**

Text can be bold.

Text can be underlined.

Text can be centered.
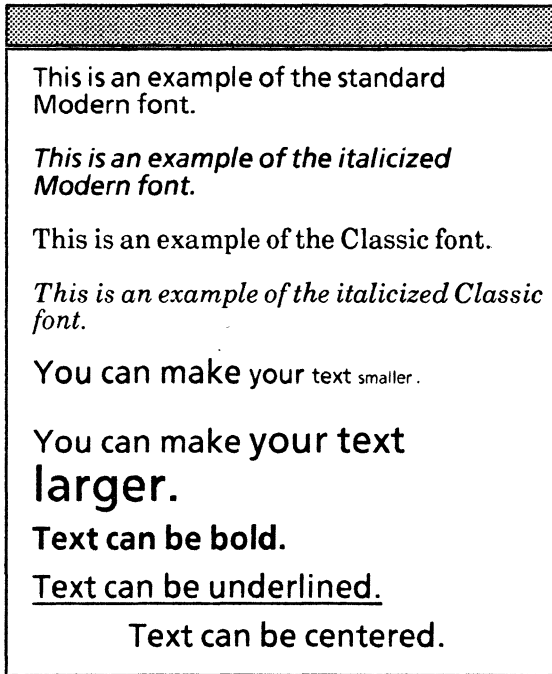
Some additional special features are also introduced in this chapter. The book feature treats documents as chapters within a book, allowing across-document desktop pagination, and the development of a single table of contents or index. (Refer to the training guide titled "VP Long Document Options" for details on creating a table of contents and an index.)

The <FIND> feature searches through a document for preselected specific text and changes it upon request.

One more feature is the selection of special keyboards, which allows you to type special characters and even type in a foreign language.

This chapter is designed to provide the general concepts and practice necessary to create a document by entering text as well as deleting, copying, moving, and customizing it.

After completing this chapter, you should be able to:

- Enter and edit text in a document

- Change the name of a blank document

- Use the function keys, the character property sheet, and <SAME> to change text in a document

- Set page layout

- Redesign text into multiple columns

- Set paragraph properties

- Create a book

- Define printing options

- Use <FIND>

- Access the special, office symbols, and foreign language keyboards

Getting started

It is recommended that you complete the following before beginning this chapter:

- "Xerox ViewPoint"

- "VP NetCom", "VP RemoteCom", or "VP StandAlone", depending upon the configuration of your workstation

VP Document Editor software must be installed and running. Refer to the "Application Loader" chapter of the "Xerox ViewPoint" training guide for information on loading of software.

The folder labeled Training: Document Creation contains all the documents necessary to complete this chapter. Copy it to your desktop and rename it. This automatically allows you to work with a copy of the original documents and to store your completed practices.

NOTE: Since there are original practice documents and answer documents in this folder, it is recommended that you copy all the documents within the folder to the desktop.

It should take approximately six hours to complete this training. It is advisable that you have the tabs titled "VP Introduction" and "VP Document Editor" in the VP Series Reference Library available for easy referral.

2. Entering and editing text

Overview

The blank document icon on your desktop is used to write memos, letters, proposals, and other written communications.

After completing this section, you should be able to name the document icon, enter text in the document window, and edit this text.

Entering text in a document

One of the icons available with VP Document Editor software is the blank document icon. It is located in the basic icons divider, which is found in the workstation divider of the directory.

It is important that the blank document icon be on your desktop at all times. It is a template, the same as a pad of paper from which you tear a single sheet. Each time you want to create a new document, a blank document is copied from this template.

If a blank document icon is not on your desktop, refer to the "Xerox ViewPoint" training guide for details on how to retrieve icons from the directory.

Entering text in a blank document requires a basic knowledge of your workstation keyboard, the selection of [EDIT] in the window header (Figure 3), and the positioning of the caret in the window.

NOTE: A caret looks like an inverted "v". The first newly typed character will appear at the position of the caret.

Figure 3 **Window header of newly opened document**
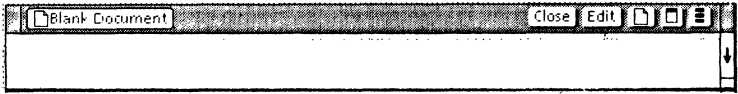
Once [EDIT] is selected, a new window header appears. This window header (Figure 4), contains new commands used during the creation of a document.

Figure 4 **Window header with new commands**
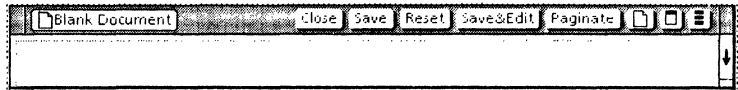
In the following exercise, you enter text in a document window.

1. **Select** the blank document icon with the left mouse button and **press** <COPY>.

2. **Position** the pointer anywhere on the desktop and **click** once with either mouse button. A copy of the blank document icon is now in its new location.

   NOTE: Position this copy of the blank document in a location away from the blank document icon template. This copied icon will be renamed and used as a practice document later in this section.

3. **Open** the copied document icon.

4. **Click** the pointer anywhere in the document. The caret does not appear in the document.

5. **Select** [EDIT] in the window header. The pointer momentarily takes on the hourglass appearance.

6. Once the pointer returns to its arrow shape, **click** the pointer anywhere on the document. The caret immediately appears on the top lefthand side of the document.

   NOTE: When there is text already in a document, the caret appears wherever you position it with the pointer.

Type the paragraph below exactly as shown. The inaccuracies will be changed in later practices.

7. **Type:** The Xerox 6085 Professional System Computer is a high performance, double-user workstation designed to support one of many applications required by the professional. The 6085 has the ability to run an integrated software system, based upon the Xerox ViewPoint 1.1 hardware package. It combines the best of two worlds - the versatility and sophistication of ViewPoint's integrated applications and the specialized applications of the PC world.

8. **Select** [CLOSE]. This saves your document automatically.

When [EDIT] is selected, the window header contains many new commands, one of which you already selected ([CLOSE]). The following three commands are also found in this window header:

● [SAVE] - This command saves a document but does not keep it in the edit mode. It is useful if you leave your workstation for a short time and do not want to log off. When [SAVE] is selected, [EDIT] appears in the window header. To continue working on this document, [EDIT] is selected and the caret is positioned.

● [SAVE&EDIT] - This command saves a document and keeps it in the edit mode. Work on this document can be continued immediately.

   NOTE: [SAVE&EDIT] can be set in the user profile. When it is, saving of the document occurs continuously while working in the document. Refer to the "Xerox ViewPoint" training guide for details on the user profile.

● **[RESET]** - This command restores a document to the state it was in when [SAVE] was last selected. All text and changes entered since that time are eliminated.

Editing text

The text within the body of a document can be edited by being deleted, moved, or copied. Additional text can also be added in the middle of a sentence or paragraph. However, you must select a specific word, sentence, or paragraph in order to complete these procedures.

Selecting location of text

The process of *selection* tells the workstation which specific text will be edited and where to locate newly added text. This process is done with the two mouse buttons, either individually or together.

In order for the system to know exactly where previously omitted information is to be placed, the caret must be positioned in that location. This is done by positioning the pointer at the desired spot and clicking with the left mouse button. The first newly typed character will appear in that location.

In the following exercise, you select a location for new text.

1. **Open** the blank document containing the paragraph entered in the previous exercise.

2. **Select** [EDIT] with the left mouse button.

3. **Position** the pointer after the letter o in the word two. (It combines the best of two...).

4. **Click** with the left mouse button.

5. **Type:** different and **press** <SPACE BAR> one time.

NOTE: The first part of that sentence should now read: It combines the best of two different worlds.

6. Select [CLOSE].

Selecting text

There are two methods for selecting text. The methods differ only in which mouse buttons are used.

- **Multiple clicking method** - Involves the use of the left mouse button only.

- **Select-adjust method** - Involves the use of the left and the right mouse button.

The *multiple clicking method* of selection is completed by positioning the pointer on a selected location in a word and clicking with the left mouse button once for a character, twice for a word, three times for a sentence, and four times for a paragraph.

NOTE: A single space between characters, as well as punctuation marks, can also be selected using the left mouse button.

In the following exercise, you use the multiple clicking method of text selection.

1. **Open** your blank document and **select** [EDIT].

2. **Position** the pointer on the letter X in the word Xerox (found in the first sentence) and **click** once with the left mouse button. The letter X is highlighted.

3. **Click** again, without moving the pointer. The word Xerox is highlighted, as well as the space following the word.

4. **Click** one more time. The entire sentence is highlighted, as well as the ending punctuation and the space(s) following it.

5. **Click** one more time. The entire paragraph, its ending punctuation, and the spaces following it are selected.

NOTE: Deselect a character, word, or sentence by clicking on a new location in the document or outside the document window. Deselect a paragraph by clicking one more time on the selected paragraph.

6. **Deselect** this paragraph.

7. **Select** the number 6 in 6085 by positioning the pointer on the 6 and clicking once.

8. **Select** the word: Professional by positioning the pointer anywhere on the word and clicking twice.

9. **Select** the last sentence by positioning the pointer anywhere on the sentence and clicking three times.

The *select-adjust method* of selecting text is a two-step process. First, by positioning the pointer on the first character of the text to be selected and clicking with the left mouse button, the character becomes highlighted. It is completed by positioning the pointer on the last character of the text to be selected and clicking with the right mouse button. All text between the first and last characters becomes highlighted.

In the following exercise, you use the select-adjust method of text selection. Your document should still be open. If it is not, open it now.

1. **Position** the pointer on the first letter in the word: ViewPoint and **click** with the left mouse button. The letter V is highlighted.

2. **Position** the pointer on the last letter in the word: ViewPoint and **click** with the right mouse button. The entire word is highlighted.

3. **Position** the pointer on the first letter in the last sentence of the paragraph and **click** with the left mouse button. The letter I is highlighted.

4. **Position** the pointer on the last letter in the last sentence of the paragraph and **click** with the right mouse button. The last sentence is highlighted.

The select-adjust method is the only method that can be used to select a specific group of letters within a word.

5. **Position** the pointer on the letter P in the middle of the word: ViewPoint and **click** with the left mouse button. The P is highlighted.

6. **Position** the pointer on the final t in the word: ViewPoint and click with the right mouse button. Point is highlighted.

If too many characters are selected, the problem is corrected by moving the pointer to the correct location and pressing the right mouse button again.

7. **Position** the pointer on the 6 in 6085 in the first sentence and **click** with the left mouse button.

8. **Position** the pointer on the P in the word: Professional and **click** with the right mouse button. 6085, the space after it, and the P in Professional are highlighted.

9. **Position** the pointer on the 5 of 6085 and **click** with the right mouse button. Only 6085 is highlighted.

Both the multiple clicking method and the select-adjust method can be used together in a selection process:

10. **Select** the first sentence using the multiple clicking method.

11. **Position** the pointer on any character in the second sentence and **click** with the right mouse button. The second sentence is also highlighted.

12. **Deselect** both sentences.

13. **Select** the word: Computer, using the multiple clicking method.

14. **Position** the pointer on any character in the next word and **click** with the right mouse button. The next word is also highlighted.

15. **Select** [CLOSE].

Deleting text

Text is deleted by selecting the text to be deleted and pressing <DELETE>.

In the following exercise, you delete text and rename a document.

1. **Select** your blank document and **press** <PROP'S>. The document property sheet immediately appears with Blank Document in the Name option highlighted. (Figure 5)

Figure 5 **Document property sheet**
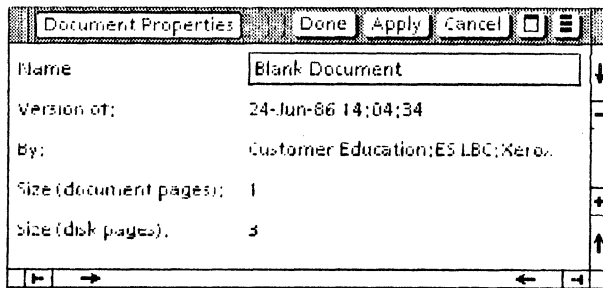
NOTE: Each blank document icon has its own document property sheet.

2. **Press** <DELETE>. The name Blank document disappears, but the caret remains in the box.

3. **Type:** DC PR 2-1 and **select** [DONE]. The property sheet closes and the closed blank document has the new name DC PR 2-1.

4. **Open** document DC PR 2-1 and **select** [EDIT].

5. **Position** the pointer on a letter in the word: double (in the first sentence) and **click** the left mouse button twice. The word is highlighted.

6. **Press** <DELETE>.

7. **Press** <SPACE BAR> and **type:** single.

8. **Position** the pointer on the letter h in the word: hardware and **click** with the left mouse button.

9. **Position** the pointer on the letter e in the word: hardware and **click** with the right mouse button. The word is highlighted.

10. **Press** <DELETE>.

11. **Type:** software.

    Your paragraph should now read:

    The Xerox 6085 Professional System Computer is a high performance, single-user workstation designed to support one of many applications required by the professional. The 6085 has the ability to run an integrated software system, based upon the Xerox ViewPoint 1.1 software package. It combines the best of two different worlds - the versatility and sophistication of ViewPoint's integrated applications and the specialized applications of the PC world.

12. **Do not close** this document.

Moving and copying text

Two more ways of editing text within a document are moving and copying text. The procedure is basically the same as for moving and copying icons, which was discussed in the chapter titled "Electronic Desktop" in the "Xerox ViewPoint" training guide.

Moving text allows you to move text around so you can read a document for continuity. This procedure is done by selecting the text to be moved, pressing <MOVE>, moving the pointer to the location where the copied text is to be placed, and clicking with the left mouse button.

Copying text allows you to try out a new text placement without losing the original text location. This procedure is done by selecting the text to be copied, pressing <COPY>, moving the pointer to the location where the copied text is to be placed, and clicking the left mouse button.

In the following exercise, you move and copy text. DC PR 2-1 should still be open. If it is not, open it now and select [EDIT]

1. **Select** the word: Computer (in the first sentence) by clicking twice.

2. **Press** <MOVE>. The pointer changes shape.

3. **Position** the pointer on the space after the word: Professional (in the first sentence) and **click** with the left mouse button. The word: Computer now follows the word: Professional.

4. **Position** the pointer on any letter in the last sentence and **click** three times with the left mouse button. The entire sentence is highlighted.

5. **Press** <COPY>. The pointer changes shape.

6. **Position** the pointer on the period at the end of the first sentence and **click** with the left mouse button. Your paragraph should read:

   The Xerox 6085 Professional Computer System is a high-performance, single-user workstation designed to support one of many applications required by the professional. It combines the best of two different worlds - the versatility and sophistication of ViewPoint's integrated applications and the specialized applications of the PC world. The 6085 has the ability to run an integrated software system, based upon the Xerox ViewPoint 1.1 software package. It combines the best of two different worlds - the versatility and sophistication of ViewPoint's integrated applications and the specialized applications of the PC world.

   NOTE: Occasionally, when you move or copy a word or sentence, spaces before and/or after may be deleted. These spaces can be inserted simply by positioning the pointer at the appropriate location, clicking with the left mouse button to position the caret, and pressing the spacebar.

7. Select [CLOSE].

Summary

In this section, you studied how to:

- Copy a document icon and rename it
- Enter and edit text in a document
- Select, move, and copy text

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this chapter.

The following pages contain an optional self check exercise.

Self check 2-1

You have practiced entering and editing text in a document. Now you are ready to try these skills on your own. Open DC SC 2-1 and select [EDIT]. If you need assistance on any of the procedures, turn to the next page for detailed instructions.

1. Enter the following sentence after the spaces following the period of the first sentence:

    It is a fast, convenient, and cost-effective way to ensure that users can take full advantage of the 2700's ability to produce executive-quality printed communications.

2. Correct the spelling of the word readibility (in the third sentence) by changing the first i to the letter a.

3. Correct the word: compuer (in the fourth sentence) by adding the letter t after the letter u.

4. Move the words: create borders and graphs (last sentence) to just before the words: utilize logos (also in the last sentence).

5. Copy the second sentence to a position after the words: As you can see (last sentence).

6. Change the "I" in the word "it" (last sentence) to "i".

Answers to self check 2-1

1. **To enter a sentence after the first sentence:**

   Position the pointer on the space after the period of the first sentence.

   Click once with the left mouse button to position the caret.

   Type the sentence.

2. **To correct the spelling of readibility:**

   Position the pointer on the first i in the word.

   Click once with the left mouse button.

   Press <DELETE>.

   Type: a.

3. **To correct the spelling of compuer:**

   Position the pointer on the letter u in the word: compuer.

   Click once with the left mouse button.

   Type: t.

4. **To move create borders and graphs:**

   Position the pointer on the space before the first letter of the above phrase.

   Click with the left mouse button.

   Position the pointer on the comma after the phrase.

   Click with the right mouse button.

   Press <MOVE>.

   Position the pointer on the comma following the words: print with multiple fonts.

   Click with either mouse button.

5. **To copy part of the second sentence to the last sentence:**

   Select the second sentence using the select-adjust method.

   Press <COPY>.

   Position the pointer on the space after the comma following the words: As you can see,...

   Click with the left mouse button.

6. **To change the letter "I" to an "i" in the last sentence:**

   Select the letter "I" in the word "It" in the last sentence.

   Press <DELETE>.

   Type: i.

Your document should read as follows:

The "Document Creation" training guide is a key training tool for all customers of Xerox 2700 Distributed Electronic Printers. It is a fast, convenient and cost-effective way to ensure that users can take full advantage of the 2700's ability to produce executive-quality printed communications. Step-by-step instructions explain all the commands needed to improve readability, add impact, and ensure a professional image in forms, memos, letters, reports, and other documents. Commands are entered in the document file from a host computer or word processor as the document is created. No special software is required. Users learn how to compose forms, print with multiple fonts, create borders and graphs, and utilize logos, digitized signatures, multiple page orientations, and other special print features in their documents. As you can see, it is a fast, convenient, and cost-effective way to ensure that users can take full advantage of the 2700's ability to produce executive-quality printed communications.

3.   Changing text in a document

Overview

Main points within a document can be highlighted by boldfacing, centering, underlining, and italicizing special words and by changing the main text to a different type style or font size. Several different styles of type face, font, and size can be combined.

Every character and space in a document has properties that can be changed. Each time a new character is entered, it takes on the same properties as the character immediately preceding it. However, prior to entering the text, or once the text has already been entered, the properties of that text can be changed.

After completing this section, you should be able to make changes in text appearance, using the function keys, the text property sheet, and <SAME>.

The function keys

Specially programmed keys, called *function keys*, allow you to change the appearance of text without using the character property sheet. These changes can be made while you type as well as after the text has been entered.

The function keys and their uses are as follows:

- **<CENTER>** - Centers the text in the middle of the page.

  This is an example of centered text.

- **<BOLD>** - Darkens the text.

  This is an example of bold text.

- **<ITALICS>** - Changes the style of the text to italic.

  This is an example of italic text.

- **<SUPER/SUB>** - Changes text into superscripts or subscripts. By pressing <SUPER/SUB>, the text is placed above the line, and the characters become smaller. By pressing <SHIFT> AND <SUPER/SUB>, text is placed below the line, and the characters become smaller.

  This is an example of superscript.

  This is an example of subscript.

  NOTE: The 8010 keyboard has two keys rather than one: <SUPERSCRIPT> and <SUBSCRIPT>.

- **<STRIKEOUT>** - Draws a line through the typed text.

  ~~This is an example of strikeout.~~

  NOTE: <STRIKEOUT> is found only on the 6085 keyboard. The strikeout option on the 8010 workstation is found on the character property sheet.

- **<UNDERLINE>** - Draws a line under text.

  This is an example of underline.

  NOTE: A double underline option is found in the character property sheet.

- **<LARGER/SMALLER>** - Makes text larger or smaller. By pressing it, the text becomes smaller. By pressing <SHIFT> and <LARGER/SMALLER>, the text becomes larger.

  This is an example of making text smaller

  This is an **example** of text

becoming larger.

  NOTE: As the text becomes larger, it no longer fits within the line height. The line height must be adjusted on the paragraph property sheet.

- **<FONT>** - Changes the font, or type style, without using the property sheet. After selecting text and holding down <FONT>, a display appears on the screen showing the available type styles. This display corresponds to the function row of keys on the top of your keyboard. By pressing the key corresponding to a type style, the text takes on that font.

  NOTE: As long as <FONT> is held down, the function keys have the new meanings displayed on the screen. Once <FONT> is released, the function keys take on their original meanings.

- **<CASE>** - Changes the text to lower case or uppercase.

  NOTE: The <CASE> key is found only on the 6085 workstation, and is not functioning in the current release.

Changing properties using the function keys

Changing properties as you type

To change text properties as you type, press the desired function key and then type in the text. The text takes on the property of the function key chosen.

NOTE: By pressing more than one function key at a time, more than one property of text can be changed as it is being typed.

When you no longer want the text to contain a property, press <SHIFT> with the previously selected function key. This stops the special formatting.

NOTE: The exceptions are <SUPER/SUB> and <LARGER/SMALLER>.

Changing properties after text is entered

Properties of text can be changed once it has been typed by selecting the characters to be changed and pressing the appropriate function key. Pressing <SHIFT> together with a function key changes the text back to its original properties.

To eliminate one of several properties given to selected text, press <SHIFT> with the function key that contains the property you want to eliminate. For example:

- <BOLD> and <ITALIC> - *This is an example of bold and italics.*

- <SHIFT> and <BOLD> - *This is an example of italics alone, after deselecting bold.*

In the following exercise, you change text properties, using the function keys.

1. **Open DC PR 3-1 and select [EDIT].**

To boldface text:

2. **Select** the words: New Employee Information Booklet (in the first paragraph) and **press** <BOLD>.

To underline text:

3. **Select** the word: timely (last line of the first paragraph) and **press** <UNDERLINE>.

To italicize text:

4. **Select** the second paragraph and **press** <ITALICS>.

To eliminate italics in text:

5. With the paragraph still highlighted, **press** both <SHIFT> and <ITALICS>. The paragraph is no longer italicized.

To make text larger and smaller:

6. **Select** the first paragraph and **press** <LARGER/SMALLER> once. The first paragraph is in a smaller typeface than the second paragraph.

7. **Select** the second paragraph and **press** both <SHIFT> and <LARGER/SMALLER> twice. The paragraph is in a larger typeface than the first paragraph.

   NOTE: The font size is too large for the line height.

To correct line height:

8. **Press** <PROP'S>.

9 Select [PARAGRAPH] on the display line.

10. Select [1½] for the line height.

11. Select [DONE].

To change font style:

12. **Select** the first paragraph and **hold down** <FONT>. A display of new key meanings appears on your screen.

13. **Select** the function key corresponding to <CLASSIC>.

14. **Release** <FONT>. The first paragraph is in the Classic font style.

To center text on a page:

15. **Select:** ACME & SONS and **press** <CENTER>. The text is centered on the page.

16. **Select:** NEW EMPLOYEE INFORMATION BOOKLET and **press** <CENTER>. This text is also centered on the page.

17. **Open** DC A PR 3-1. Your document should look like this.

18. **Select** close on both documents.

Using the character property sheet

Another way to change character properties is to select a character or string of characters and press <PROP'S>. When the text property sheet appears, there are three property sheets from which to choose: the character property sheet, the paragraph property sheet, and the tab settings property sheet. When the appropriate property sheet and properties are selected, and the property sheet closed, the changes appear in the document itself. (Figure 6)

Figure 6 **Character property sheet**

- **The Font option** - Provides several different type styles. All workstations have Classic and Modern fonts, but additional fonts are available. The different fonts are found in an auxiliary menu in the Font option.

  NOTE: If a font is selected which is not available, black boxes appear in place of the characters selected:

  ■■■■■■■

  If this happens, deselect the font that is not available.

- The Size option - Allows the size of the text within a document to be changed. Not all sizes are available for all fonts. Once a font style is selected, the Size option adjust for that font.

- The Face option - Allows the look of the text to be changed. Four options exist for this property: [BOLD], [ITALICS], [STRIKEOUT], and [UNDERLINE]. One or more of these options can be selected at one time. [UNDERLINE] has three different options: [NONE], [SINGLE], and [DOUBLE].

  NOTE: If a combination of typefaces is selected that does not exist for that font, the text is replaced by black boxes.

  If this happens, deselect the typeface for the particular font, or change the font style.

In the following exercise, you change character properties in your document.

To change the first title of the document :

1. Open DC PR 3-2 and select [EDIT].

2. Select: ACME & SONS, the title in the document and press <PROP'S>. The text property sheet appears with the character property sheet selected.

3. Position the pointer on the font auxiliary menu within the property sheet.

4. Hold down the left mouse button, move the pointer to [CLASSIC], and release the left mouse button. [CLASSIC] appears in the box to the right of the menu.

5. Select [APPLY].

6. Select [24] for the size.

7. Select [BOLD] for the typeface.

8. Select [APPLY] in the window menu.

To adjust the line height:

9. Select [PARAGRAPH] on the display line. The paragraph property sheet is displayed.

10. Select [TRIPLE] for the line height.

11. Select [DONE].

    NOTE: The font size on the character property sheet is directly related to the line height on the paragraph property sheet. Therefore, whenever you change the font size on the character property sheet, you should select [APPLY] to determine if the line height needs to be adjusted before you close it.

To change the second title of the document:

12. Select: NEW EMPLOYEE INFORMATION BOOKLET and press <PROP'S>.

13. Change the size to [24] and select [SINGLE] for Underline.

14. Select [APPLY] in the window menu.

To adjust the line height:

15. Select [PARAGRAPH].

16. Select [DOUBLE] for the line height.

17. Select [DONE]. The text fits within the line height.

To change the size of text:

18. Select the first paragraph and press <PROP'S>.

19. Select [CHARACTER] on the display line.

20. Select [18] for the size.

21. Select [APPLY].

To adjust the line height:

22. Select [PARAGRAPH].

23. Select [DOUBLE] for the line height.

24. Select [DONE].

25. Open DC A PR 3-2. Your document should look like this.

26. Close both documents.

Using <SAME>

<SAME> allows properties to be changed quickly by copying the desired properties from selected text in a document to other text in your document.

To change font properties, the text is selected, using the select-adjust method, and <SAME> is pressed. The procedure is completed by selecting the text displaying the particular properties you wish to copy.

NOTE: Using the multiple clicking method of paragraph selection, the same paragraph properties (line height, justification, and so forth) are copied, but not the same character or font properties.

In the following exercise, you use <SAME>.

1. Open DC PR 3-3 and select [EDIT].

2. Select the second paragraph, using the select-adjust method and press <SAME>. The following message appears in the message area:

   "Please indicate the source of the properties with either button."

3. Click the left mouse button on any character in the first paragraph. The second paragraph has taken on the font properties of the first paragraph.

4. Select the number 1 in the first paragraph and press <SAME>.

5. Click the left mouse button on a character in the text: NEW EMPLOYEE INFORMATION BOOKLET found in the first paragraph. The number 1 is in boldface type.

6. Select the number 2 and press <SAME>.

7. Click the left mouse button on number 1. The number 2 is in boldface type.

8. Open DC A PR 3-3. Your document should look like this.

9. Close both documents.

Summary

In this section, you studied how to:

- Change the appearance of text, using the various function keys

- Change the font, size, and face of text, using the character property sheet

- Adjust line height to accommodate text, using the paragraph property sheet

- Change properties of text by copying other text, using <SAME>.

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this chapter.

The following pages contain an optional self check exercise.

Self check 3-1

You have practiced changing text within a document, using the function keys, the character property sheet, and <SAME>. Now you are ready to try it on your own. Open DC SC 3-1, and select [EDIT]. If you need assistance on any of the procedures, turn to the next page for detailed instructions.

1. Change CREDIT UNION to font size 24.

2. Adjust the line height for a larger font.

3. Center CREDIT UNION and NEW ACCOUNT INFORMATION BOOKLET.

4. Place New Account Information Booklet in the first paragraph in boldface type.

5. Place NEW ACCOUNT INFORMATION BOOKLET in italics.

6. Change the second paragraph's font properties to those of the first paragraph.

Answers to self check 3-1

1. **To change CREDIT UNION to font size 24:**

   Select: CREDIT UNION.

   Press <PROP'S>.

   Select [24] for text size.

   Select [APPLY].

2. **To adjust the line height for a larger font:**

   Select [PARAGRAPH].

   Select [DOUBLE] for the line height.

   Select [DONE].

3. **To center CREDIT UNION and NEW ACCOUNT INFORMATION BOOKLET:**

   Select CREDIT UNION.

   Press <CENTER>.

   Select NEW ACCOUNT INFORMATION BOOKLET.

   Press <CENTER>.

4. **To place New Account Information Booklet in the first paragraph in boldface type:**

   Select New Account Information Booklet.

   Press <BOLD>.

5. **To place NEW ACCOUNT INFORMATION BOOKLET in italics:**

   Select NEW ACCOUNT INFORMATION BOOKLET.

   Press <ITALICS>.

6. **To change the second paragraph's font properties to those of the first paragraph:**

Select the second paragraph, using the select-adjust method.

Press <SAME>.

Click on any character in the first paragraph.

CREDIT UNION

NEW ACCOUNT INFORMATION BOOKLET

The purpose of the **New Account Information Booklet** is to provide you with the information necessary to update and balance your new checking account.

This booklet will also provide you with an overview of what additional options are available to you as a new First Interstate Savings and Loan customer.

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4. Setting page layout

Overview

Page size and margins are usually determined before typing is begun. Your workstation, however, allows you to determine these elements before, during, or after the document has been created. The page layout properties on the same document can be changed several times without having to retype a word.

After completing this section, you should be able to enter a page format character and a page break character into a document, define the document's page size and margins, begin a new page within an existing document and change its properties, and redesign text into multiple columns.

Page format character

Page layout properties are controlled by the page format character:

Every document has one of these characters at the top of the first page. It follows the first new paragraph character. The page format character stores page layout properties, such as the size of the page, the size of the page margins, page numbering, and heading and footing properties.

Additional page format characters can be inserted in a document by holding down <KEYBOARD>, pressing the function key corresponding to <SPECIAL>, pressing the key corresponding to the page format character (<3> on the standard keyboard), and releasing <KEYBOARD>. Unless otherwise set, each new page format character entered contains the default properties, which are the original page layout properties set by the system.

Figure 7 **Special keyboard**

View of the left side of
the special keyboard keys.
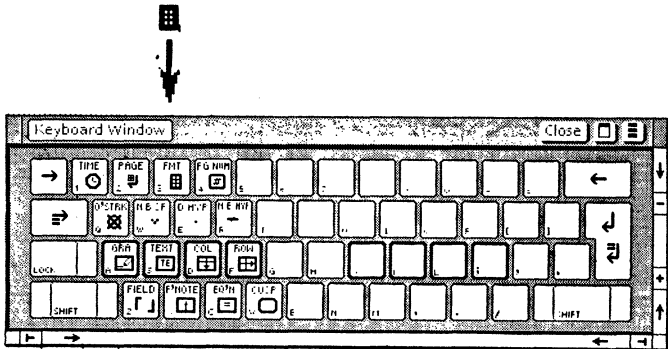
The special keyboard (Figure 7) is displayed on the bottom of the screen by positioning the caret exactly where the new page format character is to be located, holding down <KEYBOARD>, pressing the function key corresponding to <SPECIAL>, and then pressing the function key corresponding to <SHOW>. It remains in view until <KEYBOARD> is released. Then the visual representation of the actual keyboard is displayed.

The procedure to enter a new page format character is to hold down <KEYBOARD>, press the key corresponding to <SPECIAL>, press <3>, and release <KEYBOARD>.

Unless otherwise set, each new page format character contains the default properties, which are the original page layout properties set by the system.

Specifying page layout prior to entering text

The page format character is not visible until [SHOW STRUCTURE] is selected in the window auxiliary menu.

Once the page format character is visible, it can be selected. By pressing <PROP'S>, the page format property sheet appears. This property sheet contains three property sheets: the page layout property sheet, the page headings property sheet, and the page numbering property sheet. The page layout property sheet is used to change page margins and page size (Figure 8.)

Figure 8 Page layout property sheet

Specifying page size

Each document retrieved from the directory is automatically set to 8.5 by 11 inches. The size of the document can be changed, however, by selecting the desired size option on the page layout property sheet. If the option [OTHER] is selected, the exact size of paper must be entered. This size can be defined in inches, millimeters, centimeters, points, or spaces.

Specifying page margins

Each document contains four margin locations: left, right, top, and bottom. These margins refer to the amount of space surrounding the text on a page. All margins are automatically set for 1 inch. If the size of any one margin or a combination of margins is to be changed, the exact amount must be entered. This amount can be defined in inches, millimeters, centimeters, points, or spaces.

In the following exercise, you use the page layout property sheet.

1. **Open** DC PR 4-1 and **select** [EDIT].

2. **Select** [SHOW STRUCTURE] in the document menu.

   NOTE: The page format character and other non-printing characters do not appear on the printed page.

3. **Select** the page format character and **press** <PROP'S>.

4. **Select** [PAGE LAYOUT] on the display line, if not already selected.

5. **Change** the left and right margins to 1 inch.

6. **Change** the top and bottom margins to 2 inches.

7. **Select** [DONE]. The document has not changed in appearance.

The document must be paginated in order for the changes to take place. There are three ways to paginate a document:

Select [PAGINATE] in the window header (or, if there is no room in the window header, in the floating item auxiliary menu) of the document. The system scans the information typed and determines how many pages are needed to present it. Pagination also displays selected page margins, determines the final placement of any graphics, reduces the total disk size of the document, and saves it on the workstation disk.

Select [SIMPLE PAGINATE] in the document menu. This command makes pagination faster, but it does not reduce the total disk size of the document or save it on the workstation disk. It is useful after you have typed several pages of new text and want to determine where pages start and end.

Select [PAGINATE] in the desktop auxiliary menu. This command paginates a closed document, folder, or book.

NOTE: Pagination divides a document into pages, but it does not number them. Page numbering is discussed later in this chapter.

8. Select [PAGINATE] in the floating items auxiliary menu. When pagination is completed, the document exhibits the newly selected margin measurements.

NOTE: [PAGINATE] may either appear in the window header of the document or the floating items auxiliary menu. This depends on the size of the document window.

9. **Open DC A PR 4-1.** Your document should look like this.

10. Select [CLOSE] on both documents.

Starting a new page and changing its properties

As documents are written, there is often a need to change the layout of the pages. For example, starting a new chapter requires text beginning on a new page. Writing a newsletter requires a multiple column format. Page layout changes can be made at any stage in the document creation process.

To create a new page, a page break must be entered. Text subsequent to that page break begins on a new page after pagination.

In order to change page layout properties on a new page, the page format character must be the first character on that page. To ensure this, a page break character must be entered before 'the page format character (Figure 9).

Figure 9 **Page layout characters**

Page break
character - begins a
new page.

Page format character
- allows new page
layout changes

To enter a page break, position the caret in the location for the new page. Hold down <KEYBOARD>, press the function key corresponding to <SPECIAL> and press the key corresponding to the page break character (<2> on the the standard keyboard).

NOTE: The page break character can start a new column by selecting that option on the break property sheet.

Then, if desired, the page format character can be inserted. Text from that point on appears on a new page and displays whatever new page layout properties are selected in the page format property sheet.

In the following exercise, you begin a new page and change the properties of that page.

1. **Open** DC PR 4-2 and **select** [EDIT].

2. **Select** [SHOW STRUCTURE] in the document menu.

3. **Find** the phrase: Page break here (in the middle of the first page of the document).

4. **Select** the final e in the word: here.

5. **Hold down** <KEYBOARD>.

6. **Press** the function key corresponding to
   <SPECIAL>, **press** <2>, and press <3>. A
   page break and a page format character are
   entered. The page format character is
   highlighted.

7. **Release** <KEYBOARD>.

8. **Press** <PROP'S>.

9. **Select** [OTHER] as the Page Size option.

10. **Delete** the old width and **type**: 6.

11. **Change** the left and right margins to 0.5 inch.

12. **Change** the top and bottom margins to 2 inch.

13. **Select** [DONE].

    NOTE: Changes made on the property sheet are
    recorded when you select [DONE] but do not
    take effect until the document is paginated.

14. **Select** [PAGINATE]. The first page displays the
    old margin settings.

15. **Scroll** to the second page. The page margins
    have been changed, and the words: THE MOUSE
    begin the page.

16. **Do not close** this document.

Creating multiple columns

Multiple columns are created by entering the number
of desired columns and the between-column spacing
on the page layout property sheet. After pagination,
the document reflects the new multiple column
layout.

NOTE: After creating multiple columns, the top lines
of each column may not be flush. This may be due to
an extra paragraph character in the first column. If
that is the case, delete that character.

In the following exercise, you create multiple columns. DC PR 4-2 should still be open. If not, open it now and select [EDIT].

1. **Scroll** to the first page of the document.

2. **Select** the page format character at the beginning of the document and **press** <PROP'S>.

3. **Change** the Number of Columns option to 2.

4. **Select** [BALANCED] in the Columns option. [BALANCED] is now highlighted.

   NOTE: [BALANCED] allows the least amount of text to be divided into the number of columns indicated. If [BALANCED] is not selected and there is not enough text for more than one column, only one column is displayed.

5. **Change** the left and right margins to 1 inch.

6. **Change** the top and bottom margins to 2 inches.

7. **Select** [DONE]. The document remains the same.

8. **Select** [PAGINATE]. The text up to the new page break has been redesigned into two columns.

9. **Do not close** this document.

Determining column widths

When multiple columns are created, all columns are the same width. The workstation determines the width by dividing the specified number of columns into the width of the page, taking into account left and right page margins and between-column spacing (Figure 10).

Figure 10 **Multi-column page**

The into	The into	The into
width of	width of	width of
a is the	a is the	a is the
column	column	column
is the is	is the is	is the is
determi	determi	determi
ned by	ned by	ned by
dividing	dividing	dividing
the the	the the	the the
number	number	number
of is the	of is the	of is the
columns	columns	columns
into the	into the	into the
width of	width of	width of

left page   spacing between   right page
margin   columns   margin

Individual column widths can be reduced by selecting the column whose width you want to change and redefining the paragraph margins in its paragraph property sheet.

Creating column breaks

In order to begin a new section of text in a new column, a column break must be inserted. Column breaks, like page breaks, are created by inserting a page break character at the point at which you want a new column to begin.

A page break is changed into a column break by selecting [NEW COLUMN] on the break property sheet.

In the following exercise, you insert a column break and change the width of a column. DC PR 4-2 should still be open. If not, open it now and select [EDIT].

1. **Scroll** to the second page, titled THE MOUSE.

2. **Select** the page format character on this page and **press** <PROP'S>.

3. **Enter** 3 into the Number of Columns option.

4. **Select** [BALANCED]. This option is highlighted.

5. **Change** the left and right margins to 0.

6. **Select** [DONE].

7. **Paginate** the document. The text below the second page format character is divided into three columns.

8. **Find** the phrase: Enter new column break here (second column of the second page).

9. **Select** the final e in the word: here.

10. **Hold down** <KEYBOARD>, and **press** the function keys corresponding to <SPECIAL>, and <2>. A page break character is entered.

11. **Press** <PROP'S>.

12. **Select** [NEW COLUMN] and [DONE].

13. **Select** [PAGINATE]. A new column begins on the next page after the words: Enter new column break here.

NOTE: The text below a column break always appears in the next column. If the next column is on the next page, the text appears in the first column of that page.

Since [BALANCED] was selected on the page layout property sheet, the columns are always balanced, even when text is moved to another column.

14. **Open** DC A PR 4-2. Your document should look like this.

15. **Close** both documents.

Summary

In this section, you studied how to:

- Enter a page format character and a page break character into a document

- Use the page layout property sheet to change page margins and page size

- Start a new page and change its properties

- Develop multiple columns in a document

- Adjust the width of individual columns

- Use a new column break to redefine the beginning of a new column

If you need more practice in changing the layout of a document, complete the exercises again. To do this, use new copies of the practice documents for this section.

The following page contains an optional self check exercise.

Self check 4-1

You have practiced changing page layout, using the page layout property sheet before and after entering text in a document. Now you are ready to try it on your own. Open DC SC 4-1 and select [EDIT]. If you need assistance on any of the procedures, turn to the next page for detailed instructions.

1. Cause the page format character to appear in the document.

2. Change all margins to 1 inch, and the page size to 8 inches by 11 inches, using the page layout property sheet.

3. Enter a page break and a page format character after the words: PAGE BREAK HERE.

4. Format the text after the second page format character into two balanced columns with 1/2 inch inter-column spacing.

5. Enter a column break character after the words: COLUMN BREAK HERE.

Answers to self check 4-1

1. **To cause the page format character to appear in the document:**

    Select [EDIT].

    Select [SHOW STRUCTURE] in the document menu.

2. **To change all margins to 1 inch, and the page size to 8 inches by 11 inches, using the page layout property sheet:**

    Select the page format character.

    Press <PROP'S>.

    Enter 1 into all margin boxes.

    Select [OTHER] in the Page Size option.

    Delete any size information in the width box and type: 8

    Select [DONE].

    Select [PAGINATE].

3. **To enter a page break and a page format character after the words: PAGE BREAK HERE:**

    Select the period after the final E in the word: HERE.

    Hold down <KEYBOARD>.

    Press the function key corresponding to <SPECIAL> and then press the keys corresponding to the page break character (<2>) and the page format character (<3>).

    Release <KEYBOARD>.

    Select [PAGINATE] in the floating items auxiliary menu.

4. **To format the text after the second page format character into two balanced columns:**

    Select the newly entered page format character.

    Press <PROP'S>.

    Delete the 1 in Number of Columns and enter 2.

    Select [BALANCED].

    Delete .25 in Spacing Between Columns and enter .5.

    Select [DONE].

    Select [PAGINATE].

    Scroll down to second page.

5. **To enter a column break and page format character after COLUMN BREAK HERE:**

    Select the period after the final E in the word HERE.

    Hold down <KEYBOARD>.

    Press the function key corresponding to <SPECIAL> and then press the keys corresponding to the page break character (<2>) and the page format character (<3>).

    Select the page break character.

    Press <PROP'S>.

    Select [NEW COLUMN] and then [DONE].

    Select [DONE].

    Select [PAGINATE].

   Open DC A SC 4-1. Your document should look like this.

    Close both documents.

5. Setting paragraph properties

Overview

The look of your document can be changed by altering the properties of the paragraphs within the document, including margins, line height, text alignment, and line spacing. You can also change tab settings to indent text and line up decimal numbers, and add dot leaders to a tab indent (Figure 11).

Figure 11 **Tabs and line spacing**
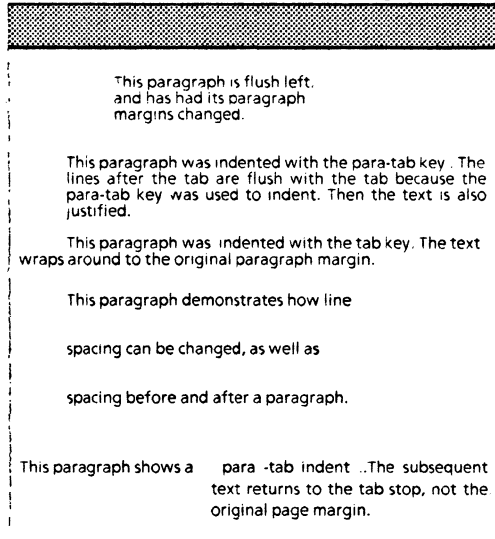
After completing this section, you should be able to change paragraph properties, using the paragraph property sheet, keep related paragraphs or titles and paragraphs on one page, use <SAME> to copy paragraph properties, set tab properties, using the tab setting property sheet and the carriage display property sheet, and add dot leaders to tabbed text.

New paragraph character

Paragraph properties are controlled by the new paragraph character.

⇦

This character is visible only when [SHOW NON-PRINTING] is selected in the document auxiliary menu. It appears whenever < RETURN > is pressed.

The new paragraph character stores paragraph properties, such as margins, line height, space between paragraphs, line alignment, and proximity of titles and paragraphs.
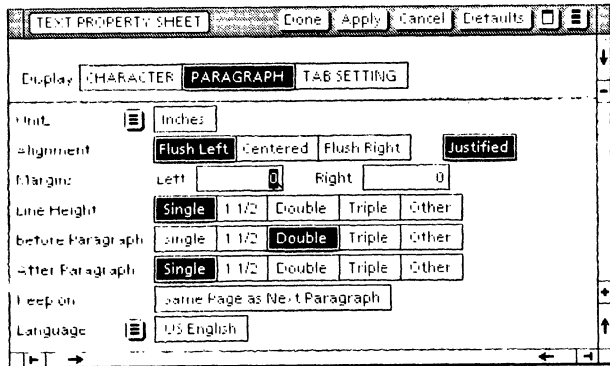
A new paragraph has the same paragraph properties as the preceding one unless the properties are changed. Changes, such as line height, margins, and spacing, can be made by using either the paragraph property sheet or <SAME>.

Using the paragraph property sheet

When any document is first opened, the new paragraph character is not visible. It becomes visible when [SHOW NON-PRINTING] is selected in the document auxiliary menu.

Once the new paragraph character is visible, it can be selected. By pressing <PROP'S>, the text property sheet appears. This property sheet contains three property sheets: the character property sheet, which was already used for changing appearance of text; the paragraph property sheet (Figure 12), which is used for changing the properties of paragraphs; and the tab settings property sheet, which is used for setting paragraph tabs.

Figure 12 **Paragraph property sheet**

Whenever you select the new paragraph character, and press <PROPS>, the paragraph property sheet is automatically opened.

Setting alignment of text

When the paragraph property sheet is first opened, the alignment of text is flush left. The alignment can be changed to centered or flush right by selecting the appropriate option. The text can be justified for any of the three options.

NOTE: Justified means that the text is aligned on both the left and right margins. The text in this chapter is justified.

Setting paragraph margins

Paragraph margins (the amount of space to the left or right of a paragraph in relation to the page margins) are automatically set at 0. This means there is no indentation from the page margins.

> Margins can be indented by entering the amount of indentation in the Margins option. These margins were changed by entering 20 for the left margin and 10 for the right.

NOTE: The size can be defined in inches, millimeters, centimeters, points, or spaces. This selection is made in the property sheet auxiliary menu.

Line height

The amount of space between the lines in a paragraph can be changed by selecting a line height option (Figure 13). Defaults automatically set line height to single spacing.

Figure 13 **Line height**

This is an

example of

double line

height.

This is an

example of triple

line height.
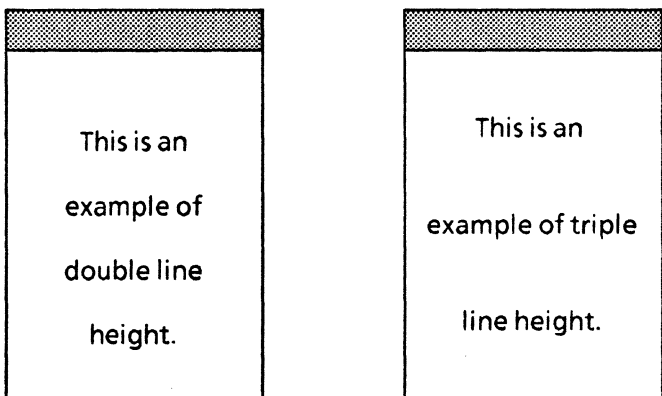
Spacing before and after paragraphs

The system automatically sets the number of lines before and after a paragraph at single. The number of lines can be set at space and a half, double, or triple spacing. Selecting [OTHER] allows you to enter your own spacing. This amount can be entered in inches or other measurements by selecting options found in the units auxiliary menu.

Keeping titles and paragraphs together

After pagination, a paragraph and its title, or two paragraphs that must stay together, may be placed on different pages. To eliminate this problem, [SAME PAGE AS NEXT] can be selected in the paragraph property sheet.

A paragraph stays on the same page as its heading by selecting the heading through multiple clicking, pressing <PROP'S>, and selecting [SAME PAGE AS NEXT].

Two paragraphs can also be kept together by selecting the first paragraph through multiple clicking and following the same procedure. The text selected automatically appears on the same page as the paragraph immediately following it (Figure 14).

Figure 14 **Keeping titles and paragraphs together**

Selecting the heading keeps the title and the paragraph immediately following it together.

Selecting the first paragraph keeps that paragraph and the one immediately following it together.

CURRENT PROJECTS

In order to keep the above heading and this paragraph together, you must select the title and select [SAME PAGE AS NEXT] on the paragraph property sheet.

This paragraph must stay with the following paragraph. This is done by selecting this paragraph and selecting [SAME PAGE AS NEXT] on the paragraph property sheet.

The above paragraph is then automatically placed on the same page as this paragraph

In the following exercise, you use the paragraph property sheet.

1. Open DC PR 5-1 and select [EDIT].

2. Select [SHOW NON-PRINTING] in the document auxiliary menu.

To center text:

3. Select ROCMAN.

4. Press <PROP'S>. The text property sheet appears.

5. Select [PARAGRAPH] on the display line.

6. Select [CENTERED] for the Alignment option.

7. Select [DONE].

8. Select the three lines of the address, using the select-adjust method.

9. Press <PROP'S>and select [PARAGRAPH] on the display line.

10. Select [CENTERED] for the Alignment option.

11. Select [DONE].

To change paragraph margins:

12. Select the second paragraph, beginning with "A Free How to Plan Seminar...", and press <PROP'S>.

13. Select [PARAGRAPH] on the display line.

14. Change the left margin to .5.

15. Select [FLUSH LEFT] and [JUSTIFIED] for the Alignment option.

16. Select [DONE].

To place heading and paragraph on same page:

17. Select "DON'T MISS THIS FANTASTIC OPPORTUNITY", using the multiple clicking method and press <PROP'S>.

18. Select [PARAGRAPH] on the display line.

19. Select [SAME PAGE AS NEXT PARAGRAPH] and select [DONE].

20. Select [PAGINATE]. The title and the paragraph immediately following it appear on page 2.

21. **Do not close** your document.

Using <SAME>

The same key is used to change paragraph properties such as line height, alignment, and spacing between paragraphs.

To change the paragraph properties of an entire paragraph to those of another paragraph, the first paragraph is selected by clicking on a character within the paragraph four times and pressing <SAME>. The procedure is completed by clicking anywhere on the paragraph displaying the properties you wish to copy.

In the following exercise, you use <SAME> to change paragraph properties. Document DC PR 5-1 should still be open. If it is closed, open it now and select [EDIT].

1. **Select** (using the multiple clicking method) the first paragraph on the second page beginning with: An early reservation.

2. **Press** <SAME>.

3. **Click** anywhere on the first paragraph beginning: You are cordially invited. The first paragraph selected now has double spacing between the lines.

4. **Press** <SAME> again.

5. **Click** anywhere on the last paragraph of the first page, beginning: The seminar leader is Leonard Makin. The originally selected paragraph assumes the line height and centered justification of the copied paragraph.

6. **Open** DC A PR 5-1. Your document should look like this.

7. **Close** both documents.

Using the carriage display to set paragraph margins

Another way to set paragraph margins is by using the carriage display property sheet.

To set a margin, the desired paragraph(s) is selected and <MARGINS> is pressed. The carriage display property sheet (Figure 15) becomes immediately visible across the top of the screen.

Figure 15 **Carriage display window**
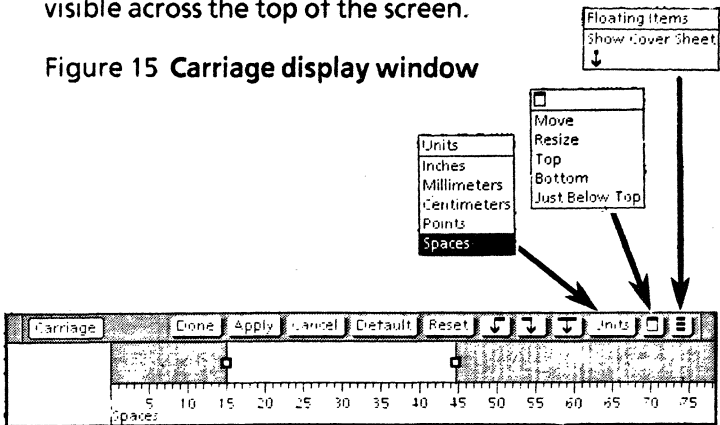
By selecting and moving the little boxes on each side of the display, the left and right margins can be redefined. As each box is moved, the indented area is shaded to allow better visualization of the margins.

NOTE: Tabs can also be set on the carriage display property sheet. This will be discussed in the section titled "Tabs".

NOTE: The paragraph property sheet and carriage display property sheet do not allow the width of a paragraph to be less than 1 inch.

In the following exercise, you use the carriage display property sheet.

1. **Open** DC PR 5-2 and **select** [EDIT].

2. **Select** the last paragraph on the first page through the first paragraph on the second page.

3. **Press** <MARGINS>. The carriage display property sheet immediately appears on the top of your screen.

4. **Select** the left margin control point (white box) and **press** <MOVE>.

5. **Click** on 10. The white box has moved to 10, and the area outside the new margin is now shaded.

6. **Select** [APPLY]. The left margin of the two selected paragraphs is indented.

7. **Select** the right margin control point and **press** <MOVE>.

8. **Click** on 42. The white box has moved to 42, and the area outside the new margin is shaded.

9. **Select** [APPLY]. The right margin of the two selected paragraphs is indented.

   NOTE: If you select a control point and then attempt to move it outside either the right or left page margin, the pointer becomes a question mark and the action is ignored.

10. **Select** [DONE].

11. **Open** DC A PR 5-2. Your document should look like this.

12. **Select** [CLOSE] on both documents.

Tabs

Tabs define specific horizontal positions for text to appear in a document. They are used to indent paragraphs or set up columns.

Types of tabs

Your workstation allows information to be entered in column form using left, right, and centered tab alignment. It also allows decimal numbers to be aligned using the decimal tab. (Figure 16)

Figure 16 **Types of tabs**

Flush left - The first letter typed begins at the tab, and the other letters follow.

Flush right - The last letter typed ends at the tab, and previous letters precede it.

Centered - An equal grouping of letters appears on both sides of the tab point.

Decimal - Used for lists of numerals, with all numerals having their decimal point at the tab. This is useful for statistical work.

Figure 17 shows examples of the four tab alignments.

Figure 17 **Tab alignment examples**

LEFT	CENTERED	RIGHT	DECIMAL
John	Benson	Economics	83.9
Sally	Christenson	History	93.59
Daniel	Hay	Geography	84.373
Paul	Sanford	Biology	99.835

A property called *dot leaders* appears when a left or right aligned tab is selected on the tab setting property sheet. By selecting [DOT LEADER], the white space between the tab character and the next tab stop is filled with a pattern of alternating periods and spaces. The periods and spaces are displayed in the same font as the tab character, allowing a variation in the look of the pattern.

The following is an example of dot leaders:

. . . .   Using dot leaders . . . .   Yes

. . . .   ***Using bold, italics*** . . . .   ***Yes***
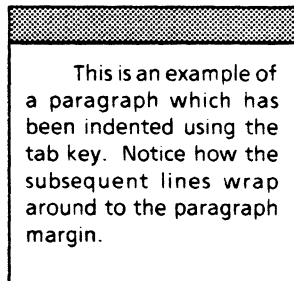
Tab keys

There are two ways to tabulate the text in a document.

● **Tab key** - Locates typed material at a preset tab location. It is located on the left side of the top row of keys.

┌─────┐
│ → │
└─────┘

Pressing the tab key enters a specified amount of space on the current line, moving subsequent text to one of the previously mentioned alignments. The first line is indented, with the subsequent lines wrapping around to the paragraph margin (Figure 18).

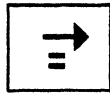**Figure 18 Paragraph using the tab key**

    This is an example of a paragraph which has been indented using the tab key. Notice how the subsequent lines wrap around to the paragraph margin.

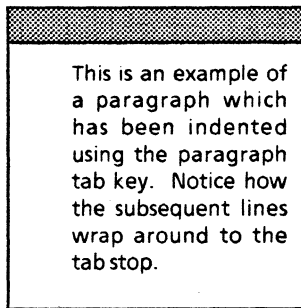When this key is pressed, the following format character appears:

→

This character is visible only when [SHOW NON-PRINTING] is selected in the document menu. It does not appear on the printed page.

- **Para-tab key** - Used mainly when indenting whole paragraphs. This key is located directly beneath the tab key in the second row of keys.

⇥

When this key is used in a paragraph, the first line is indented, with the subsequent lines aligning with the tab stop (Figure 19).

Figure 19 Paragraph using the para- tab key

This is an example of a paragraph which has been indented using the paragraph tab key. Notice how the subsequent lines wrap around to the tab stop.

If the para- tab key is pressed while you are typing, all subsequent lines of the paragraph begin at that tab stop.

Setting tabs on the carriage display property sheet

The carriage display property sheet allows tabs to be set for a document. The carriage display property sheet is displayed by pressing <MARGINS> (Figure 20).

NOTE: Default tab settings are set flush left at every quarter inch. When the tab key is pressed and no tabs have been set, the caret automatically advances three spaces.

Figure 20 **Carriage display**
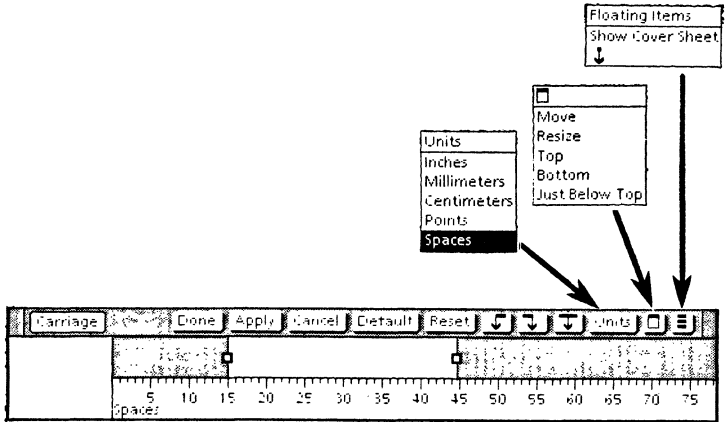
To set tabs, select the new paragraph character and press <MARGINS>. To change already existing tabs, select the paragraph and press <MARGINS>.

NOTE: The tab alignment symbols for flush left, flush right, centered and decimal tabs are found either in the window header or in the floating items auxiliary menu, depending upon the size of the window.

To enter a tab, click the left mouse button on the alignment tab you want to place on the display. It will immediately appear on the far left side of the display. By pressing <MOVE>, the symbol can be placed anywhere on the display line. Several tabs can be placed at one time in sequence by using <COPY>.

Setting tabs on the tab setting property sheet

To set the location for tabs using the tab setting property sheet, select the paragraph for which you wish to set tab locations, press <PROP'S>, and select [TAB SETTING] on the text property sheet (Figure 21).

Figure 21 **Tab setting property sheet**
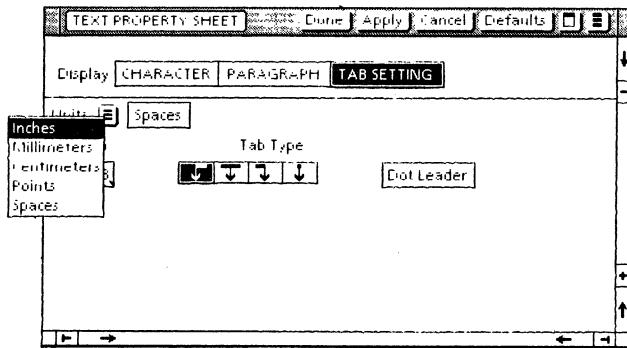
NOTE: The tab settings property sheet can also be displayed by selecting an already existing tab character and pressing <PROP'S>.

Once the tab settings property sheet is displayed, type in the number of spaces for each tab position being entered and select the type of tab desired. If a right or left aligned tab is selected, [DOT LEADER] may also be selected. The tab setting property sheet expands to allow as many as 100 tabs.

In the following exercise, you set tabs using the tab setting property sheet and the carriage display property sheet.

1. **Open** DC PR 5-3 and **select** [EDIT].

2. **Select** [SHOW NON-PRINTING] in the document auxiliary menu.

3. **Select** the list of courses offered and the number of weeks (include the new paragraph character immediately before the E in Economics).

4. **Press** <PROP'S> and **select** [TAB SETTING] on the display line.

5. **Delete:** 0 in the Position property and **enter:** 50.

6. **Select** the right aligned tab.

7. **Select** [DOT LEADER]. The box is highlighted.

8. **Select** [DONE]. The weeks move to their right-aligned position with the dot leaders preceding them.

9. **Select** the list of students, the courses completed and final percentage scores using the select-adjust method. (Include the new paragraph character immediately before the S in Sam.)

10. **Press** <MARGINS>. The carriage display window opens. The flush right tab and the decimal tab are already entered into the carriage display.

    NOTE: The carriage display window can be moved in the same manner as any other window. This allows you to position it close to whatever text has been selected.

11. **Select** the flush right tab and **press** <DELETE> .

12. **Select** the flush left tab symbol from the auxiliary menu or the window header with the left mouse button.

13. **Press** <MOVE> when the symbol appears at the left of the carriage (it is highlighted), .

14. **Move** the symbol to 30 and **click** the mouse button.

15. **Select** the decimal symbol and **press** <MOVE>.

16. **Move** the symbol to 60 and **click** the left mouse button.

17. **Select** [DONE]. Notice how the position of the course of study and percentage scores have changed.

18. **Select** [DON'T SHOW NON-PRINTING] in the document auxiliary menu.

19. **Open** DC A PR 5-3. Your document should look like this.

20. **Select** [CLOSE] on both documents.

Summary

In this section, you studied how to:

● Use the paragraph property sheet to change margins, text alignment, line height, and spacing before and after paragraphs

● Keep paragraphs or a title and a paragraph together

● Use <SAME> to copy paragraph properties from one paragraph to another

● Set paragraph margins and tabs on the carriage display property sheet

● Set tabs on the tab setting property sheet

● Add a dot leader pattern to a right or left aligned tab using [DOT LEADER] on the tab setting property sheet

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

The following pages contain an optional self check exercise.

Self check 5-1

You have practiced changing paragraph properties using the paragraph property sheet, the carriage display, and <SAME>. You have also practiced setting tabs using the carriage display and the tab setting property sheet. Now you are ready to try it on your own. Open DC SC 5-1 and select [EDIT] and [SHOW NON-PRINTING]. If you need assistance on any of the procedures, turn to the next page for detailed instructions. (The exact tab placement may be different in your document.)

1. Enter a para-tab before the first paragraph.

2. Set the para-tab at 14 spaces.

3. Set the right margin for the first paragraph at 15 points, justify the alignment, and set the line height for space-and-a-half spacing.

4. Enter the following information after the second paragraph under the appropriate column headings. The column headings are centered over the column. Description data should be flush to the margin. Use a flush left tab for the Speaker data (with dot leaders), and a decimal tab for Time data.

   Description: Introduction
   Speaker: Susan Jackson
   Time: 9:00 AM

   Description: Software Update
   Speaker: David Inten
   Time: 9:30 AM

   Description: Career Directions
   Speaker: John Besley
   Time: 11:00 AM

   Description: Questions and Answers
   Speaker: Susan, David, John
   Time: 12:30 AM

Answers to self check 5-1

1. **To enter a para-tab before the first paragraph:**

    Select [SHOW NON-PRINTING] in the document auxiliary menu.

    Select the new paragraph character before the first paragraph.

    Press the para-tab key.

2. **To set the para-tab at 14 spaces:**

    Select the para-tab just entered.

    Press <PROP'S>.

    Enter 14 into the Number of Spaces in Position option.

    Select [APPLY].

3. **To set the right margin for the first paragraph at 15, justify the alignment, and set the line height for space-and-a-half spacing:**

    Select [PARAGRAPH] in the text property sheet.

    Select [POINTS] in the Units menu.

    Delete 0 in the right margin box.

    Enter 15 in the right margin box.

    Select [JUSTIFIED].

    Select [1 1/2] for line height.

    Select [DONE].

4. **To enter columnar information:**

    Select the second new paragraph character after the column titles.

    Press <MARGINS>.

    Delete already existing tab symbols.

Select the flush left tab symbol with the left mouse button.

Press <MOVE>

Move it to 34 and click with the left mouse button.

Select the decimal tab symbol found in the floating auxiliary menu or the window header.

Once it appears on the display, press <MOVE> and click on 65.

Select [DONE].

Press <PROP'S>.

Select [TAB SETTING] on the display line.

Select [DOT LEADER] for the left-aligned tab setting.

Select [DONE].

Type: Introduction.

Press either the regular tab or the para-tab key.

Type: Susan Jackson, press the tab, type: 9:00 AM.

Press <RETURN>.

Type the remaining information.

Select [DON'T SHOW NON-PRINTING] in the document auxiliary menu.

Open DC A SC 5-1. Your document should look like this.

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6.   Books

Overview

Individual documents in a folder are treated as separate documents. When a folder is paginated, page numbering is done separately for each document. When an index or table of contents is generated for a folder, a separate index or table of contents is created for each document in the folder.

The *book* feature allows a folder-like container of documents to be treated as a single long document, like a book containing chapters. It allows page numbering across document boundaries as well as creating a single index or table of contents for the entire book. The book features are available by placing documents in a *book icon*. Aside from the above features, a book is the same as a folder and documents found within it are the same as other documents.

Documents, free-hand drawing canvases and other files can be moved into the book icon. Folders, books, and other containers cannot.

The book icon must be on your desktop prior to continuing this section. It is located in the Basic Icons divider of the directory. For details on how to retrieve this icon, refer to the "Electronic Desktop" chapter of the "Xerox ViewPoint" training guide.

After completing this section, you should be able to create continuous page numbering for all the documents within a book.

Book property sheet

The book property sheet is the same as the folder property sheet, except it does not have the Sorting option (Figure 22). All books are unsorted, allowing the user to place documents in them in any order.

Figure 22 **Book property sheet**
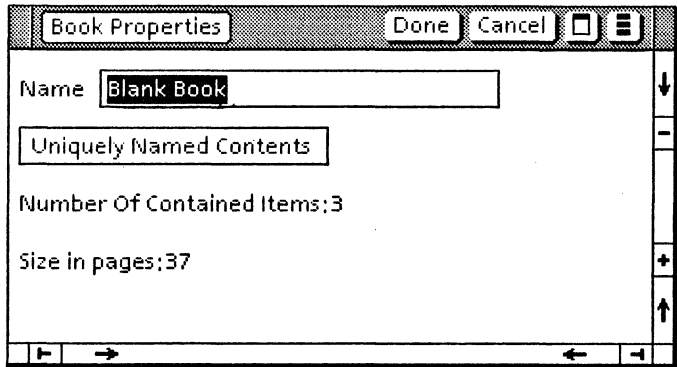
Page numbering documents in a book

Once several documents are placed in a book, continuous page numbering for all the documents can be generated. This is done by selecting [RESTART] in the page numbering property sheet of the first document in the book, selecting [CONTINUE] in the page numbering property sheets of all subsequent documents in the book, and selecting [PAGINATE] in the desktop auxiliary menu.

In the following exercise, you generate continuous page numbering for documents within a book. Be sure a book icon is on your desktop at this time.

To copy documents into the book icon:

1. Select DC PR 6-1 with the left mouse button.

2. **Select,** in order, DC PR 6-2 and DC PR 6-3 with the right mouse button.

3. **Press** <COPY> and **click** on the book icon with the left mouse button.

4. **Open** the book icon. All three documents should be in the icon in numerical order.

To set the page numbering property sheets:

5. **Open** DC PR 6-1 and **select** [EDIT].

6. **Select** [SHOW STRUCTURE] in the document auxiliary menu.

7. **Select** the page format character and **press** <PROP'S>.

8. **Select** [PAGE NUMBERING] on the display line.

9. **Select** [RESTART] in the Page Numbering option.

10. **Select** [DONE] in the property sheet window header.

11. **Select** [SHOW NEXT] in the floating items auxiliary menu.

    NOTE: [SHOW NEXT], located in the window header or the floating items auxiliary menu of a document, displays the next item in a container. It eliminates the need to close a document and reopen the next one.

12. When the next document opens, **select** [EDIT].

13. **Complete** steps 6 through 8.

14. **Select** [CONTINUE] in the Page Numbering option.

15. **Select** [DONE] in the property sheet window header and **close** the document.

16. **Complete** steps 11 through 14 for DC PR 6-3.

17. **Close** the book icon.

To paginate the documents in the book:

18. **Select** the book icon.

19. **Select** [PAGINATE] in the desktop auxiliary menu.

    NOTE: Desktop pagination is a background task. For more details, refer to the "Background Activities" chapter in the "Xerox ViewPoint" training guide.

To check the continuous page numbering pagination:

20. **Open** the book icon and **open** DC PR 6-1. Page number 1 is displayed.

21. **Holding down** the left mouse button, **move** the pointer to the bottom of the vertical scrolling area of the window and **release** the button. Page number 3 is displayed.

22. **Select** [SHOW NEXT] in the window header of DC PR 6-1. DC PR 6-2 appears and page number 4 is displayed.

23. **Drag** the pointer to the bottom of the vertical scrolling area. Page number 5 is displayed.

24. **Select** [SHOW NEXT] in the window header of DC PR 6-2. DC PR 6-3 appears and page number 6 is displayed.

25. **Drag** the pointer to the bottom of the vertical scrolling area. Page number 10 is displayed.

26. **Select** [CLOSE ALL] in the window header.

Creating a table of contents and an index for a book

A single table of contents and a single index can be generated for all documents in a book. This is done by moving the documents into a book icon, selecting the book icon, and selecting either [GENERATE TABLE OF CONTENTS] or [INDEX GENERATOR] in the document auxiliary menu.

Refer to the chapters titled "Table of Contents" and "Index Generation" in the "VP Long Document Options" training guide for specific details on generating a table of contents or an index for documents.

Summary

In this section, you studied how to:

● Desktop paginate documents in a book

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

For more information on books, refer to "Books" in the VP Series Reference Library.

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7.   Progress check

You have learned the specific skills necessary to create a document. Now you are going to test your knowledge of these skills by formatting an unformatted letter.

There are several ways to complete this formatting. If you need assistance on any of the procedures, turn to page 75 for detailed instructions on one way to format this letter.

Open DC PC 7-1 and select [EDIT]. This document is an unformatted letter. Make the following changes:

1. Change the margins of all paragraphs to be indented to 1/2 inch from both page margins.

2. Increase the line height to the firm's name and address to 1 1/2.

3. Change the firm's name to 14 point font size.

4. Center the firm's name and address, and place them in boldface type.

5. Right justify the date.

6. Add a colon after: Dear Mr. Legree.

7. Add one line space between the date and the salutation.

8. Add this sentence at the end of the first paragraph: You have been a faithful customer for many years.

9. Justify the first paragraph.

10. Indent the book titles 15 spaces.

11. Italicize and boldface book titles.

12. Type a third paragraph under the book titles: We hope to hear from you soon.

13. Eliminate the boldface and italics properties from the newly typed sentence.

14. Add one space between the newly typed sentence and Sincerely.

15. Type under Tom Scribble: Manager.

Your letter should look like this:

SCRIBBLE AND PAPIER, BOOKSELLERS
1 Rue de Livres, Paris, France

21 June

Dear Mr. Legree:

Thank you for your latest order of books from Scribble and Papier, Booksellers. You have been a faithful customer for many years.

Sent under separate cover are the following books:

Power: How to Get It!
Walking on Ice

We hope to hear from you soon.

Sincerely,

Tom Scribble
Manager

Answers to progress check

1. **To change the margins of all paragraphs to be indented to 1/2 inch from both page margins: (5)**

   Select [EDIT].

   Select [SHOW NON-PRINTING] in the document auxiliary menu.

   Select the first paragraph character (before firm's name) with the left mouse button.

   Select the last letter in the name: Tom Scribble with the right mouse button.

   Press <PROPS>.

   Select [INCHES] in the Units auxiliary menu.

   Delete the number from the left margin box.

   Type: .5 in the left margin box.

   Press <NEXT>.

   Delete the number from the right margin box.

   Type: .5 in the right margin box.

   Select [DONE].

2. **To increase the firm's name and address line height to 1 1/2: (4)**

   Select the paragraph character before the firm's name with the left mouse button.

   Select the final S in BOOKSELLERS with the right mouse button.

   Press <PROPS>.

   Select 1 1/2 for the Line Height.

   Select [APPLY].

3. **To change the firm's name to 14 font size: (3)**

   Select [CHARACTER] in the property sheet display line.

   Select [14] for the Size option.

   Select [DONE].

4. **To center the firm's name and address and place them in boldface type: (3)**

   Press <CENTER>.

   Press <BOLD>.

5. **To right justify the date: (4)**

   Select the paragraph character before the date with the left mouse button.

   Press <PROPS>.

   Select [FLUSH RIGHT] for the Alignment option.

   Select [DONE].

6. **To add a colon after: Dear Mr. Legree: (2)**

   Select the final e in Legree with the left mouse button.

   Hold down <SHIFT> and press <:>.

7. **Add one line space between the date and the salutation: (2)**

   Select the paragraph character between the date and the salutation.

   Press the return key.

8. **To add this sentence at the end of the first paragraph: You have been a faithful customer for many years.: (2)**

   Select the period at the end of the first sentence.

   Type: You have been a faithful customer for many years.

   Press the space bar twice.

9. **To justify the first paragraph: (5)**

   Select the paragraph character before the first paragraph.

   Press <PROPS>.

   Select [JUSTIFIED] in the Alignment option.

   Select [DONE].

10. **To indent book titles to 15: (5)**

    Select the paragraph character before the first book title with the left mouse button.

    Select the e in Ice with the right mouse button.

    Press <MARGINS>.

    Select a flush left tab from the auxiliary menu.

    Press <MOVE>.

    Click the left mouse button on 15.

    Select [DONE].

    Select the paragraph character before the first book title.

    Press the tab key.

Select the paragraph character before the second book title.

Press the tab key.

11. **To italicize and boldface book titles: (4)**

Select both book titles using the select-adjust method.

Press <ITALICS>.

Press <BOLD>.

12. **To type a third paragraph under the book titles : We hope to hear from you soon: (3)**

Select the e in the word Ice.

Press the new paragraph key twice.

Type: We hope to hear from you soon.

13. **To eliminate the boldface and italics properties from the newly typed sentence: (4)**

Select the last sentence using the select-adjust method.

Hold down <SHIFT> and press <BOLD>.

Hold down <SHIFT> and press <ITALICS>.

14. **To add blank line between the new sentence and Sincerely: (4)**

Select the paragraph character between Sincerely and Tom Scribble.

Press the return key.

15. **To type under Tom Scribble: Manager: (3)**

Select the e in the word Scribble.

Press the return key.

Type: Manager

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8.   <FIND>

Overview

As a document is edited, it may be found that one word does not read well and a substitution should be made. It may be found that a misspelled word appears throughout the entire document and needs to be corrected. Ordinarily, each page of text would have to be searched to find all the words to be changed.

Your workstation has a key that allows the system to do this search for you. This key is <FIND>. It initiates a find command, which is used to search a document for specific text. The text can consist of words, names, specific paragraphs, or identical passages. This command searches an entire document or just parts of it.
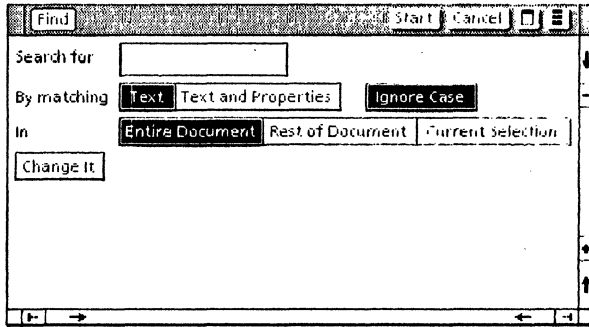
After completing this section, you should be able to use <FIND> and its option sheet to search for and change specific text within your document.

Using <FIND>

Searching for text

When specific text within a document is to be located, select anywhere in that document and press <FIND>. An option sheet appears (Figure 23).

Figure 23 <FIND> option sheet

This option sheet contains the following options:

- **[TEXT]** - Searches for specific words, ignoring text properties.

- **[TEXT AND PROPERTIES]** - Text and properties of the selected text must match the properties typed into the Search for option box.

- **[IGNORE CASE]** - If selected, searches for words ignoring uppercase and lowercase in the text sequence. If not selected, searches for words that match the text sequence exactly to the case typed in the Search for option box.

- **[ENTIRE DOCUMENT]** - The search proceeds from the beginning of the document to the end.

- **[REST OF DOCUMENT]** - The search proceeds from the present caret position to the end of the document.

- **[CURRENT SELECTION]** - The search includes only the currently selected and highlighted portion of the document.

<FIND>

In the following exercise, you search for specific text within a document.

1. **Open** DC PR 8-1 and **select** [EDIT].

2. **Select** [SHOW STRUCTURE] .

3. **Select** any character at the beginning of the document and **press** <FIND>.

4. **Type** in the Search for option box: Coaxial cable.

5. **Select** [START]. The option sheet disappears and the system automatically finds and highlights the first match in the document.

6. **Press** <FIND> twice rapidly to go to the next match of the same text sequence. The system passes over the "cable" in the same line and selects "coaxial cable" two lines below. Continue this procedure to the end of the document and the following message appears in the message area:

    "No match is found."

    NOTE: An ongoing search can be stopped at any time by pressing <STOP>.

7. **Do not close** this document.

If the search for the previously specified text is completed and a search for new text is warranted, press <FIND> once. This opens the <FIND> option sheet and allows the new text to be entered.

Substituting new text for old text

New text can be substituted for previously selected text. This is done by selecting [CHANGE IT] on the find option sheet.

For example, if "Coaxial cable" is to be changed to *"COAXIAL CABLE,"* [CHANGE IT] is selected. This selection displays new options, in which a substitution of text can be made (Figure 24).

Figure 24 **[CHANGE IT] options**
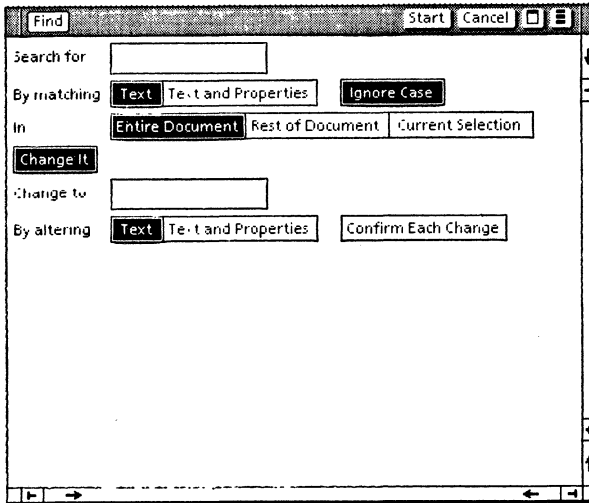
In the following exercise, you substitute new text for previously selected text. Document DC PR 8-1 should still be open. If not, open it now and select [EDIT].

1. **Select** any character in the beginning of the document and **press** <FIND>. Coaxial cable is in the Search for option box.

2. **Select** [CHANGE IT]. Several new options appear.

3. **Type** in the Change to box: *COAXIAL CABLE*. Make sure it is uppercase, italicized, and in boldface type.

4. **Select** [TEXT AND PROPERTIES] for the By altering option. This indicates that the substitution should include changes in both text and properties.

5. **Select** [CONFIRM EACH CHANGE]. This provides an audio sound at each selection as well as the following message in the message area:

   "Make the Change? [YES] [NO]"

<FIND>

Select [YES] to confirm the change. Select [NO] to leave the text as is.

NOTE: If [CONFIRM EACH CHANGE] is not selected, the system automatically makes the appropriate changes without any confirmation.

6. **Select** [START] on the find option sheet.

7. **Select** [YES] to confirm each change.

8. **Open** DC A PR 8-1. Your document should look like this.

9. **Select** [CLOSE] on both documents.

Summary

In this section, you studied how to:

● Search for specific text within a document

● Substitute new text for previously selected text

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

The following pages contain an optional self check exercise.

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9. Printing options

Overview

It is time to prepare the document for printing by deciding whether or not to have headings and footings on the pages, if lefthand and righthand pages should be specified, and how the pages should be numbered.

After completing this section, you should be able to define a page to be left or right, specify the location of headings and/or footings, determine the pattern and location of page numbers, add a binding edge to the appropriate left/right side of each page.

Defining left and right pages

The break property sheet allows you to determine whether the pages in your document are left or right pages. Documents generally begin with a right page, with additional pages alternating left and right. A specific page can be, however, designated to be left or right.

The designation of a left or right page is done by entering a break character on the page before the designated page, pressing <PROP'S>, and selecting [NEW RIGHT PAGE] or [NEW LEFT PAGE] on the break property sheet.

Inserting headings and footings

Frequently, long documents have some sort of descriptive text at the top and/or bottom of each page, which can include the name of the document, the section title, the author, or the date of its creation. This text is called a page heading or footing, depending on its location (Figure 25).

Figure 25 **Page headings and footings**

Heading

Actual body of the document.
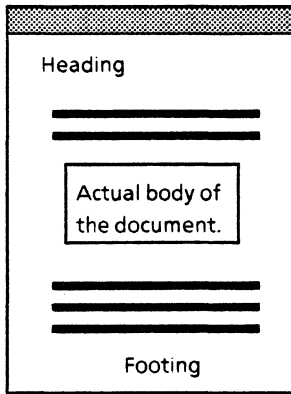
Footing

NOTE: The words "VP Series Training Guides" at the bottom of each page of this chapter represent the page footing. "Document Creation" and "Printing Options" at the top of the page are the page headings.

Page headings and footings are inserted into a document by selecting the page format character, pressing <PROP'S>, and selecting [PAGE HEADINGS]. This opens the page headings property sheet (Figure 26).

Figure 26 Page headings property sheet
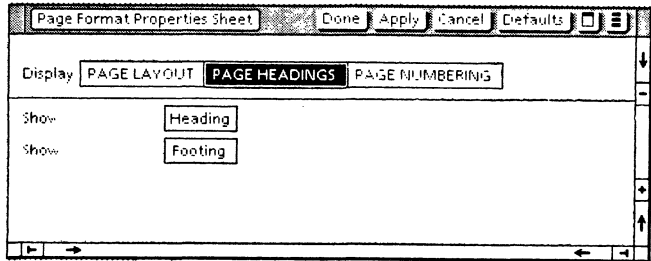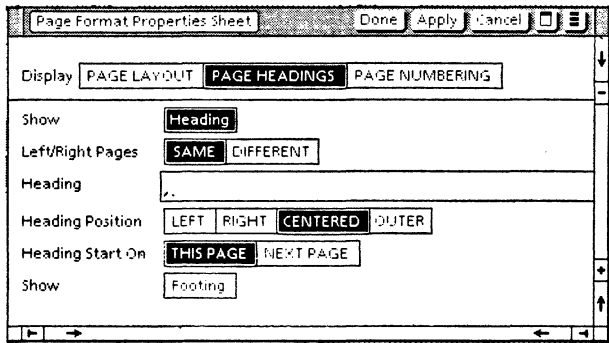

Figure 27 Page headings property sheet

Now you can define the text of the headings and/or footings, on which pages they will appear, and in which location.

A document can contain several different headings and/or footings by adding extra page format characters. Each page format character allows its own specific headings and footings to be defined.

NOTES:

- Headings and footings may contain more than one line of text. Top and bottom page margins must be large enough to accommodate them.

- The character properties of headings and/or footings (boldface, italics, and so forth) can be changed using the appropriate function keys.

In the following exercise, you create headings and footings in a document.

1. Open DC PR 9-1 and **select** [EDIT].

2. **Select** the page format character at the top of the page and **press** <PROP'S>.

3. **Select** [PAGE HEADINGS]. The page headings property sheet opens.

4. **Select** [HEADING]. The heading options appear.

5. **Type** in the Heading option box: Reference Manual.

6. **Select** [OUTER] for the heading position.

7. **Select** [FOOTING]. The footing options appear.

8. **Type** in the Footing option box: Chapter 5 - Ethernet.

9. **Select** [DONE]. The heading and footing have not yet appeared on the document.

   NOTE: Any printing option changes do not appear on the document until after it has been paginated.

10. **Paginate** the document. Scroll to the next pages to see the positioning of the headings and footings.

    NOTE: The footing always appears in the center of the bottom margin, while the heading alternates between the right and left side of the top margin. The placement of the heading depends on the right or left orientation of the page.

11. **Open** DC A PR 9-1 Your document should look like this.

12. **Select** [CLOSE] on both documents.

Inserting page numbers

Page numbers are inserted in a document by selecting the page format character, pressing <PROP'S>, and selecting [PAGE NUMBERING] to opens the page numbering property sheet (Figure 28).

Figure 28 **Page numbering property sheet**
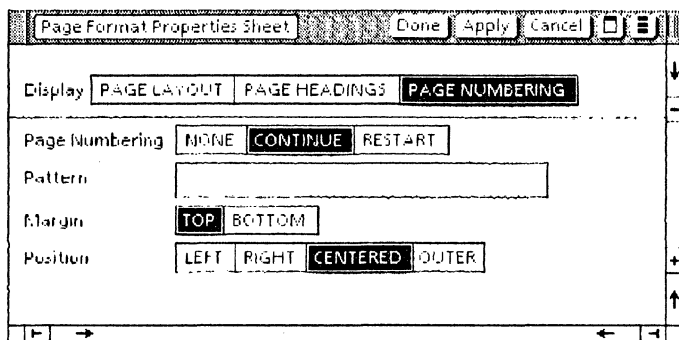
On this property sheet, the pattern of page numbers and their location and position are defined.

If page numbers previously entered in the document are to be eliminated, [NONE] is selected. No added options on the property sheet are displayed.

When a new document or a new chapter is started, [RESTART] is selected. This option allows numbering to begin with whatever number is desired. As soon as [RESTART] is selected, more options are displayed (Figure 29).

Figure 29 Additional options
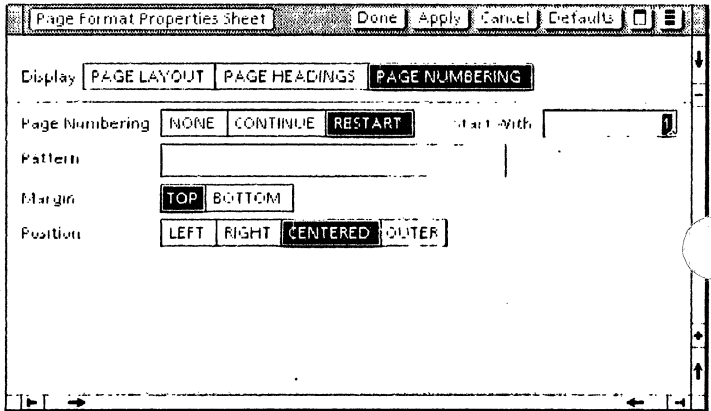
When the numbering process is to continue, based on the last numbered page from the previous page format character, [CONTINUE] is selected. When this option is selected, [START WITH], as seen in Figure 28, does not appear.

Once one of those two options is selected, the pattern of the numbering and the location on the page can be defined.

When a pattern for page numbers is developed, the page delimiter character (▦) indicates where you want the page number to appear within the pattern or text string (Figure 30). The entering of a page delimiter character is done by holding down <KEYBOARD>, pressing the function key corresponding to <SPECIAL>, pressing the key corresponding to the page page delimiter character (<4> on the standard keyboard), and releasing <KEYBOARD>.

Figure 30 **Developing a page numbering pattern**

Text string	Page number
↓	↓
1 - ▦	**1 - ▦**
↓	↓
Page - ▦	**Page - ▦**
↓	↓
# - ▦	**# - ▦**
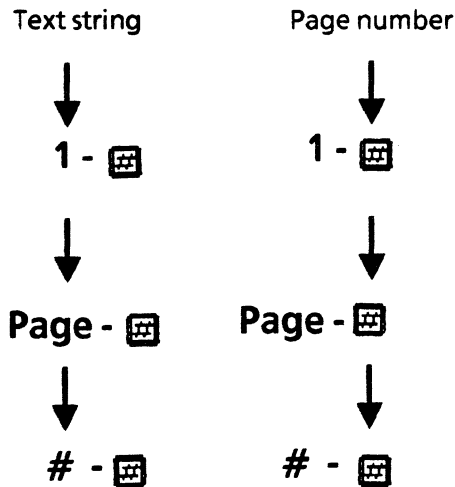
Once the document is paginated, the page number changes from page to page, but the text string is identical for all pages.

In the following exercise, you insert page numbers.

1. **Open** DC PR 9-2 and **select** [EDIT].

2. **Select** [SHOW STRUCTURE] in the document auxiliary menu.

3. **Select** the page format character and **press** <PROP'S>.

4. **Select** [PAGE NUMBERING]. The page numbering property sheet opens.

5. **Select** [RESTART].

6. Enter the number 10 in the Start With option.

7. Select inside pattern box and enter 🔲

   NOTE: To enter the page delimiter character, hold down <KEYBOARD>, press the function key corresponding to <SPECIAL>, and <4>.

8. Select [BOTTOM] for the margin.

9. Select [OUTER] for the position.

10. Select [DONE]. The page number has not yet appeared on the document. Page numbers, like headings and footings, do not appear on documents until after pagination.

11. Paginate the document. Scroll to the next pages to see the position of the page numbers.

    NOTE: A document can contain page numbers as well as headings and footings. If, however, the position selected for page numbers is the same as that selected for headings and/or footings, (for example, both are [CENTERED]) the page number always appears before the heading or footing.

12. Open DC A PR 9-2. Your document should look like this.

13. Select [CLOSE] on both documents.

Specifying the binding edge

The binding edge specifies an additional amount of space used for binding after the document is printed. The size can be defined in inches or other Units, such as millimeters, centimeters, points, or spaces. Selecting [FIRST PAGE BINDING POSITION] determines the side of the page on which the extra space is to appear. The [BINDING MARGIN] and [FIRST PAGE BINDING POSITION] options are both found on the page layout property sheet.

Summary

In this section, you studied how to:

- Insert headings and footings using the page headings property sheet

- Insert page numbers and specify location and pattern using the page numbering property sheet

- Specify placement and width of the binding edge of a document using the page layout property sheet

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

Self check 9-1

In this section and the previous section, you have practiced searching for specified text using <FIND>, setting headings and footings, and entering page numberings. Now you are ready to try these skill on your own. Open DC SC 9-1 and select [EDIT]. If you need assistance on any of the procedures, turn to the next page for detailed instructions. Upon completion of the self check exercise, open DC A SC 9-1 to view what the document should look like.

1. Enter the following page number on the bottom outer edge: Page ⬚ of 2.

2. Enter the following centered footing: RFS Seminar.

3. Search for the word: financial. Change it to *financial* (bold and italics).

Answers to self check 9-1

1. **To enter the following page number on the bottom outer edge: Page ⊞ of 2:**

   Select [EDIT].

   Select the page format character and press <PROP'S>.

   Select [PAGE NUMBERING].

   Select [RESTART].

   Type in the Pattern box: Page ⊞ of 2.

   Entering the number tile:

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <4>.

   Release <KEYBOARD>.

   Select [BOTTOM] for the Margin option.

   Select [OUTER] for the Position option.

   Select [DONE].

   Paginate the document.

2. **To enter the following centered footing: RFS Seminar:**

   Select the page format character and press <PROP'S>.

   Select [PAGE HEADINGS].

   Select [FOOTING].

   Type in the Footing box: RFS Seminar.

   Select [CENTERED] for the Footing Position.

   Select [DONE].

   Paginate the document.

3. **To search for the word: financial. Change it to:**
   financial **(bold and italics):**

   Select anywhere on the document.

   Press <FIND>.

   Type in the Search for box: Financial.

   Select [TEXT] and [IGNORE CASE].

   Select [CHANGE IT].

   Type in the Change to box: ***financial*** .

   Select [TEXT AND PROPERTIES] .

   Deselect [CONFIRM EACH CHANGE].

   Select [START]. (All instances of "financial" are italicized and placed in boldface type.)

10.   Using alternate keyboards

Overview

The keyboard presently used on your workstation is the English or standard keyboard. It is not the only keyboard available to you. Your workstation offers two added features, both involving the use of alternate, or virtual, keyboards. One feature allows special characters to be entered that do not appear on the standard keyboard. The other allows the use of foreign language keyboards, such as German and French. These keyboards are all accessible by pressing <KEYBOARD>.

After completing this section, you should be able to enter the date and time using the special keyboard, enter office characters using the office symbols keyboard, and view the foreign language keyboards.

Overview

The page format character and the page break character are both examples of characters entered from one of the virtual keyboards, the special keyboard.

Another useful key on the special keyboard is <DATE AND TIME>. This key allows the current date and time to be entered into documents without having to type them. It is a convenient way to fill date fields for memos or letters or keep revised documents in chronological order.

To enter the date and time, position the pointer on the character after which you want the date and time to appear, hold down <KEYBOARD>, press the function key corresponding to <SPECIAL>, and press <1>.

To view the special keyboard (Figure 31), hold down <KEYBOARD>, and press the function keys corresponding to <SPECIAL> and <SHOW>. This display remains visible until <KEYBOARD> is released. Pressing <SET> allows <KEYBOARD> to be released, leaving the keyboard displayed.

Figure 31 **View of left side of the special keyboard keys**
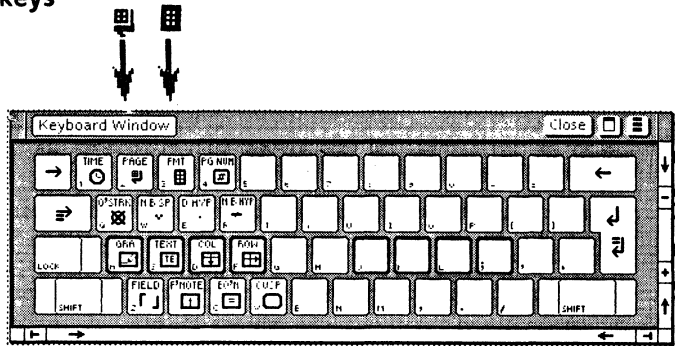
In order to return to the standard keyboard, the English keyboard must be selected and set. Hold down <KEYBOARD>, press the function keys corresponding to <MORE>, <ENGLISH>, and <SET>, and release <KEYBOARD>. The standard keyboard is now displayed. If the display is no longer required, select [CLOSE].

In the following exercise, you enter the date and time, using the special keyboard.

1. **Open** DC PR 10-1 **and select** [EDIT].

2. **Position** the caret on the colon following the word: "Received" (at the top of the document).

3. **Hold down** <KEYBOARD>.

4. **Press** the function keys corresponding to <SPECIAL> and <SHOW>. The special keyboard appears at the bottom of the screen.

5. **Press** <1> on the standard keyboard. This corresponds to the date and time key on the special keyboard. The date and time immediately appears in your document.

    NOTE: The date and time assume the font characteristics of the selected character.

6. **Release** <KEYBOARD>. The special keyboard disappears, but the keyboard interpretation window remains.

7. **Select** [CLOSE] on the keyboard window.

8. **Do not close** this document.

NOTE: Several other keyboards are available, such as LOGIC, math, and ASCII. Refer to the sub-tab titled "Keys/Keyboards" in the VP Series Reference Library for more information.

Office keyboard

The office keyboard (Figure 32) allows characters often used in business documents but not readily available on a standard keyboard to be entered.

Figure 32 **View of the office symbols keyboard layout**
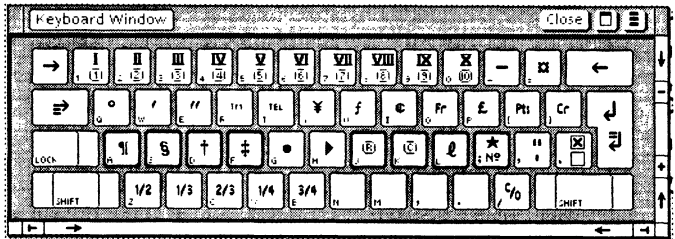
To enter an office character, position the pointer at the spot where the character is to be entered, hold down <KEYBOARD>, and press the function keys corresponding to <OFFICE> and' <SHOW>. The office keyboard appears at the bottom of the screen. The specific key for the desired character is pressed next. To maintain the display, press the function key corresponding to <SET>.

NOTE: Some keys contain two characters. (Notice the top row of the office symbols keyboard.) In this case, <SHIFT> and the specific key are used to display the top character, and the specific key alone is used to display the bottom character.

In the following exercise, you use the office symbols keyboard. DC PR 10-1 should still be open. If not, open it now and select [EDIT].

1. Select anywhere within the document.

2. Hold down <KEYBOARD> and press the function keys corresponding to <OFFICE>, <SHOW>, and <SET>. The office symbols keyboard is displayed.

3. Release <KEYBOARD>. The office symbols keyboard remains displayed.

4. Delete the 2 in Phase 2 and type: ②.

   NOTE: The keyboard has been redefined and remains the office symbols keyboard until a different keyboard has been set.

To set the keyboard back to English:

5. Hold down <KEYBOARD>, press the function key corresponding to <MORE>, and press the function keys corresponding to <ENGLISH>, <SHOW>, and <SET>. The English keyboard appears.

6. Release <KEYBOARD>. The English keyboard remains open.

7. Select [CLOSE] on the keyboard window.

8. Select [CLOSE] on the document.

Foreign language keyboards

Foreign language keyboards allow you to type in the following different languages:

- Greek
- French
- German
- Italian
- European
- Standard Russian

- Spanish
- US Russian
- French Canadian
- Greek
- Dvorak

The extended language software packages also allow you to type text in Japanese and Chinese.

The foreign language keyboards are displayed in the same manner as the special and office symbols keyboards.

NOTE: The foreign language keyboards need not be displayed on the screen (using <SHOW> or <SET>) in order for them to be effective. When you are finished with the foreign language keyboard, remember to return to the English keyboard. For more information, refer to the sub-tab titled "Keys/Keyboard" in the VP Series Reference Library.

Summary

In this section, you studied how to:

- Use <KEYBOARD> to display the special keyboard, the office symbols keyboard, and the foreign language keyboards

- Use the function key corresponding to <SET> to display the virtual keyboard on the screen for longer usage

- Return the keyboard to its original English version

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

BASIC GRAPHICS

XEROX

VP Series Training Guide
Version 1.1

Table of contents

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1.　　　　　Introduction

Many documents produced in an office contain graphics as well as text. Business documents often contain lines between text, boxed-in areas, and organization charts, as well as a variety of illustrations. Using the basic graphics feature of the VP Document Editor software, you can create graphics that are an integral part of your document, not something that must be drawn or pasted in later.
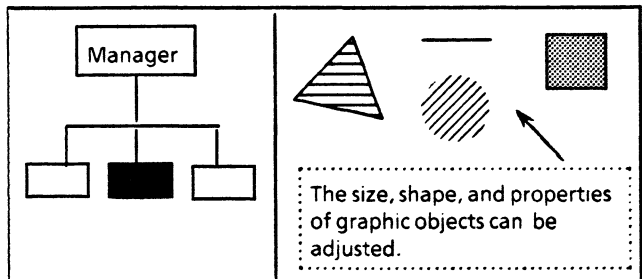
This chapter is designed to provide you with the general concepts and practice necessary to insert and manipulate graphic and text frames in a document, and enter and manipulate graphic objects, clusters of objects, and text within these frames.

After completing this chapter, you should be able to:

● Insert a graphic frame in your document, and expand and contract it as necessary

● Select and copy objects from the basic graphics transfer document to a graphic frame

● Enter graphics into a graphic frame using the special graphic keyboard

● Manipulate graphic objects by moving, copying, and deleting them, as well as increasing their size

● Change the texture, shading, and line structure of copying properties of other objects

● Insert anchored and embedded graphic and text frames, and change their properties

- Enter text after a graphic frame

- Use the grid to place objects in a graphic frame

- Create, select, and manipulate clusters of graphic objects

NOTE: Documents containing graphic illustrations can be printed, mailed, and filed in the same way as other documents.

Illustrations can also be created using VP Free-Hand Drawing software. Refer to the tab titled "VP Free-Hand Drawing" in the VP Series Reference Library.

Getting started

It is recommended that you complete the following before beginning this chapter::

- "Xerox ViewPoint"

- "Document Creation"

- "VP NetCom", "VP RemoteCom", or "VP Standalone", depending upon the configuration of your workstation

VP Document Editor software must be installed and running. Refer to the "Application Loader" chapter of the "Xerox ViewPoint" training guide for information on loading of software.

The folder labeled Training: Basic Graphics contains all the documents necessary to complete this chapter. Copy it to your desktop and rename it. This automatically allows you to work with a copy of the original documents and to store your completed practices.

NOTE: Since there are original practice documents and answer documents in this folder, it is recommended that you copy all the documents within the folder to the desktop.

It should take approximately three to four hours to complete this training. It is advisable that you have the tabs titled "VP Introduction" and "VP Document Editor" in the VP Series Reference Library available for easy referral.

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2. Entering graphic frames

Overview

Graphics are contained within boxes called **anchored frames**. These frames provide the boundaries necessary for separating graphics and text within your document. Therefore, whenever you want to create illustrations in a document, you must first insert a graphic frame.

Once a frame is entered into a document, stretch it to the desired size to insert graphic objects for the illustrations. After completing this section, you should be able to insert a graphic frame in a document and to expand and contract this frame as necessary.

Entering graphic frames

To enter a graphic frame into a document, select the location it is to appear, press and hold down <KEYBOARD>, press the function key corresponding to <SPECIAL>, press <A>, and release <KEYBOARD>.

NOTE: <A> corresponds to the graphic frame on the special keyboard.

Selecting [SHOW STRUCTURE] in the document auxiliary menu displays the anchor that accompanies an anchored frame. The placement of the anchor determines where the frame appears in a document.

In the following exercise, you insert a graphic frame in your document using the special keyboard.

1. **Open** practice document GR PR 2-1.

2. **Select** [EDIT] in the document window header.

3. **Select** [SHOW STRUCTURE] in the document auxiliary menu (to see the anchor).

4. **Select** the last character in the first paragraph (select the letter "r").

5. **Hold down** <KEYBOARD>.

6. **Press** the function key corresponding to <SPECIAL>.

7. **Press** <A>. An anchor is entered at the selected point in the document.

8. **Release** <KEYBOARD>.

    The graphic frame appears centered in the first available space in your document below its anchor. It is not placed in its correct location until after the document is paginated.

9. **Select** [PAGINATE] in the document auxiliary menu.

In the following exercise, you insert a second graphic frame within the same document. This time, insert it below the second paragraph.

1. **Select** the last character in the second paragraph of your practice document GR PR 2-1.

2. **Insert** a graphic frame following steps 5 through 8.

3. **Paginate** your document.

Stretching a graphic frame

Graphic frames are initially too small for most illustrations and must be enlarged. To adjust the size of a graphic frame, you use the function key that corresponds to <STRETCH>. It appears when a graphic frame is selected.

<STRETCH> is used both to expand and contract the size of a graphic object. It corresponds to <CENTER> in the row of function keys across the top of the standard keyboard.

When a graphic frame is selected and the function key corresponding to <STRETCH> is pressed, the control point nearest to the position where the frame was selected becomes movable.

This movable point is called the **guiding point.** In addition, a control point opposite the guiding point becomes stationary and is designated by an X. This stationary point is called the **pinned point.** Refer to Figure 1.

Figure 1 **Guiding and pinned points**
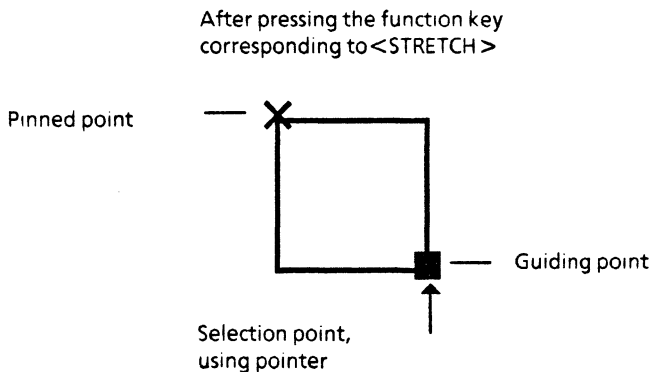
Holding down one of the mouse buttons and moving the pointer results in the guiding point following the pointer and the pinned point remaining stationary. When the mouse button is released, the frame assumes its new size.

A graphic frame can be adjusted in all directions. However, the directions in which a particular guiding point will move depends on the location of the guiding point.

Figure 2 illustrates the directions in which three different guiding points may be moved.

Figure 2 Different ways a frame can be adjusted
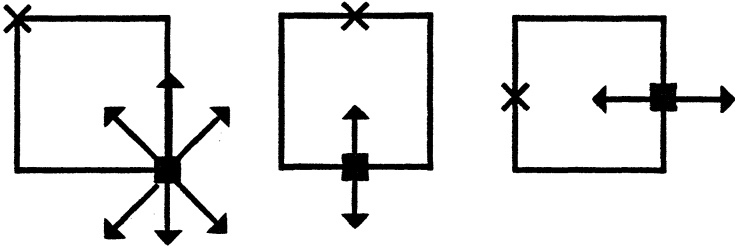
In the following exercise, you enlarge the first frame you entered into your document using the function key corresponding to <STRETCH>.

NOTE: <STRETCH> can be used to both expand and contract a graphics frame or object.

1. **Select** the center of the bottom line of the graphics frame in your practice document. When it is selected, the frame is highlighted.

2. **Press** the function key corresponding to <STRETCH> (<CENTER> in the top row of the standard keyboard).

   NOTE: The guiding point appears at the bottom center of the frame.

3. **Hold** down the left mouse button.

4. **Move** the pointer several inches below the frame (continue to hold down the left mouse button).

5. **Release** the left mouse button.

NOTE: The frame should now be several inches longer than before.

In the following exercise, you stretch the second frame you entered into your document. This time you select inside a corner to stretch it both horizontally and vertically.

1. **Select** the frame inside the bottom righthand corner.

2. **Stretch** it down and to the right, until the frame is several inches high and 3 or 4 inches wide.

   The frame should be larger than when you first inserted it into your document. If it is not, repeat steps 2 through 5 in the previous exercise.

3. **Paginate** the document. A frame will not appear in its correct location until it is paginated.

   NOTE: To shrink the size of a frame, you select the frame, press the function key corresponding to <STRETCH>, and move the pointer inside the frame (toward the pinned point) to select a destination.

4. **Close** GR PR 2-1.

For more information on adjusting graphic frames refer to the tab titled "Basic Graphics" in the VP Series Reference Library.

Summary

In this section, you studied how to:

● Insert a graphic frame into your document

● Use the function key corresponding to <STRETCH> to expand and contract the size of the graphic frame

● Paginate the document to position the frame in its correct location

If you need more practice, complete the exercises again. To do this, use a new copy of the practice document for this section.

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3. Entering graphic objects into a document

Overview

Basic graphic elements and shapes are called *transfer objects*. These objects can be copied from the basic graphics transfer document into a graphic frame in your document or be entered into a graphic frame using the special graphic keyboard. After an object is entered into a frame, its size, position and properties can be adjusted to create various illustrations.

After completing this section, you should be able to select and copy objects from the basic graphics transfer document to a graphic frame, and enter objects from the special graphic keyboard. Once these objects are in the graphic frame, you should be able to move, copy, and delete them, as well as change their size.

The basic graphics transfer document

The basic graphics transfer document must be on your desktop in order to complete the rest of this chapter. It is stored in the workstation divider icon in the directory. Refer to the "Xerox ViewPoint" training guide for detailed instructions on copying an icon from the directory to the desktop.

Selecting graphic objects

Objects from the basic graphics transfer document must be copied to a graphics frame in a document.

To select a graphic object, position the pointer on part of the object and click the left mouse button. Control points that look like small black boxes appear along the edge of the object when it is selected.(Figure 3).

Figure 3 **Unselected and selected objects**

Unselected
rectangle

Selected
rectangle
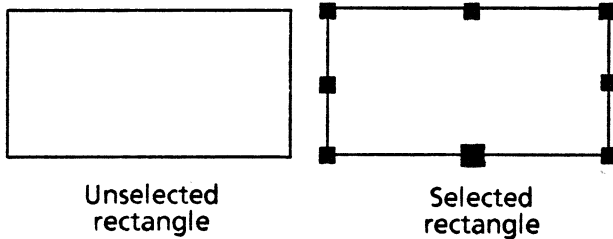
In the following exercise, you select graphics objects in the basic graphics transfer document.

1. **Open** the basic graphics transfer document.

2. **Position** the pointer along the edge of a line in the basic graphics transfer document.

3. **Click** the left mouse button. The line is selected when a black control point is visible at each end. (Figure 4.)

Figure 4 **Unselected and selected line**

4. **Position** the pointer along the lower edge of the rectangle in the basic graphics transfer document.

5. **Click** the left mouse button. The rectangle is selected when black control points appear along its edges.

6. **Do not close** the transfer document.

When an object is selected, one control point appears slightly larger than the others. This is the *guiding point*. It is used for precise selection when you manipulate objects.

Entering graphic objects into a graphic frame

The objects needed to create basic graphic illustrations include dots, lines, ellipses, circles, triangles, rectangles, and embedded graphic and text frames (Figure 5).

Figure 5 **Graphic transfer objects**

Text Frame   Graphics Frame
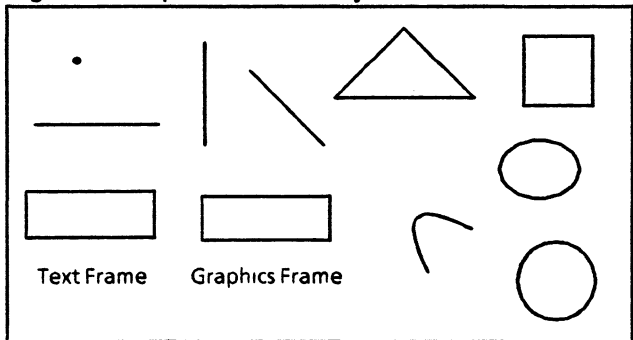
Graphic objects are moved or copied by selecting the object, pressing < MOVE > or < COPY >, and selecting the destination within the graphic frame with the mouse. They are deleted by selecting the object and pressing < DELETE >.

In general, graphic objects can be moved or copied from one graphic frame to another, as long as the destination is another graphic frame.

Objects moved or copied into a graphic frame are layered according to when they were placed in the frame. When two objects overlap, the object entered last is placed on top. Depending on the type and shading of the top object, the object on the bottom could show through or be covered. For more information on layering graphic objects, refer to the sub-tab titled "Basic Graphics" in the VP Series Reference Library.

NOTE: The basic graphics transfer document contains not only the objects for creating basic graphics but also additional objects used for creating data-driven graphics, programming fill-in rules, and creating free-hand drawing illustrations. They are discussed in the respective training guides.

Copying an object from the basic graphic transfer document to a graphic frame

<COPY> is used to transfer a graphic object from the basic graphic transfer document to a graphic frame.

In the following exercise, you copy graphic objects from the basic graphics transfer document into the frame in your document. Before beginning this exercise, make sure that the basic graphics transfer document is still open on your desktop.

1. Open the practice document titled GR PR 2-1.

2. Select [EDIT] in the document window header.

3. Select the rectangle in the basic graphics transfer document.

   NOTE: The rectangle appears as follows:

4. Press <COPY>.

5. Hold down the left mouse button and point at the destination for the rectangle inside the graphic frame in your practice document.

6. Release the mouse button.

   If the rectangle did not transfer to the specified location, try again, making sure that the left mouse button is held down while the "ghost," or outline, of the rectangle is lined up in the correct location. Do not release the mouse button until the rectangle is in the position desired.

NOTE: Graphic objects should always be copied from the basic graphics transfer document rather than moved. This ensures that the transfer objects will always remain in the transfer document for future use.

In the following exercise, you copy a text frame.

1. **Select** the text frame in the basic graphics transfer document.

2. **Press** <COPY>.

3. **Hold down** the left mouse button and point at a destination inside the graphic frame for the text frame.

4. **Release** the left mouse button.

A text frame is copied into the graphic frame in the practice document.

In the following exercise, you copy a straight line.

1. **Select** one of the lines in the basic graphics transfer document.

2. **Press** <COPY>.

3. **Hold down** the left mouse button and position the pointer inside the graphic frame.

4. **Release** the mouse button when the outline of the line is in the desired position.

5. **Close** the basic graphics transfer document.

6. **Do not close** the practice document.

Special graphic keyboard

The special graphic keyboard allows graphic objects available on the basic graphics transfer document to be entered into a graphic frame in a document through the keyboard, without opening the transfer document.

Figure 6 Special graphic keyboard
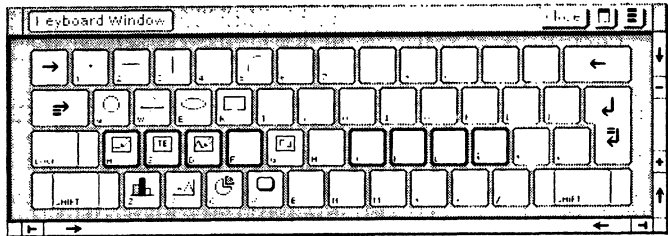
The special graphic keyboard is displayed by placing the caret in a graphic frame, holding down <KEYBOARD>, and pressing the function key corresponding to <SPECIAL> and <SHOW>. Releasing <KEYBOARD> converts the display back to the default keyboard on your system.

NOTES: When using the graphic keyboard:

- It can be displayed for an extended period of time by selecting the function key corresponding to <SET>. <KEYBOARD> can then be released.

- When text is selected outside of the graphic frame, the keyboard display automatically converts back to the default keyboard.

The desired graphic object is entered into the graphic frame by pressing the function key corresponding to the object or selecting the desired key on the keyboard display with the mouse.

NOTE: If several objects are entered without moving the caret, they will be layered one on top of the other.If the caret is repositioned in the frame, the graphic keyboard display is replaced by the default keyboard. Entering a different object in a new position within the frame requires the redisplaying of the graphic keyboard.

In the following exercise, you display the special graphic keyboard and enter objects into a graphic frame. Your practice document should still be open. If not, open it now and select [EDIT].

To display the special graphic keyboard:

1. **Position** the caret in the graphic frame found within the practice document.

2. **Press** and hold down <KEYBOARD>.

3. **Press** the function keys corresponding to <SPECIAL>, <SHOW>, and <SET>.

To enter graphic objects:

4. **Press** the function keys corresponding to the circle, the horizontal line, and the triangle (<Q>, <2>, <W>). The three objects entered in the graphics frame look like this:
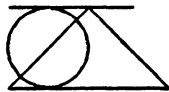
5. **Press** the function key corresponding to the text frame (<S>). The text frame is placed on top of the other three objects, blocking them partially from view:
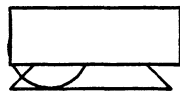
6. **Place** the caret in a new location in the graphic frame. The default keyboard is displayed.

7. **Select** [CLOSE] in the window header of the display keyboard.

Manipulating graphic objects within a graphic frame

Once the desired graphic objects are placed in a graphic frame, they can be moved around within the frame, have their size adjusted, and be deleted.

Moving a graphic object

To move an object, select it, press <MOVE>, position the pointer at the new destination and click the left mouse button.

In the following exercise, you move the rectangle in the graphic frame in your practice document.

1. **Select** one of the rectangles.

2. **Press** <MOVE>.

3. **Position** the pointer at another destination inside the graphics frame

4. **Click** the left mouse button. The rectangle is moved to its new location within the frame.

5. **Do not close** this document.

Adjusting the size of a graphic object

The size of graphic objects are adjusted by using either the function key corresponding to <STRETCH> or the function key corresponding to <MAGNIFY>.

Using <STRETCH>

The function key corresponding to <STRETCH> adjusts the size of an object. However, it can change the shape of the object, since the part being stretched does not remain proportionate to the rest of the object. (Figure 7)

Figure 7 **Stretching a graphic object**

A triangle as
entered directly
to the frame

The same triangle stretched
to the left

The same
triangle stretched
to the top
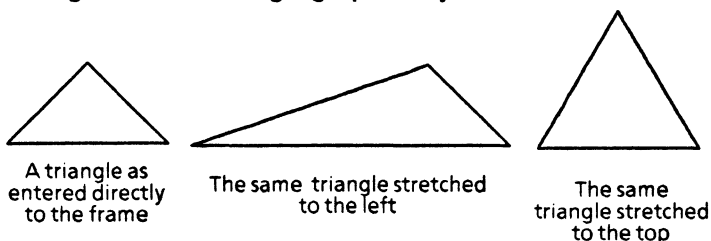
To stretch an object, select it, press the function key corresponding to <STRETCH>, and select the desired location.

In the following exercise, you adjust the size of a rectangle using the function key corresponding to <STRETCH>.

1. Select the side of the rectangle to be stretched.

2. **Press** the function key corresponding to <STRETCH> to see the guiding point and pinned point.

    NOTE: The guiding point can be stretched away from the pinned point to increase the size of an object, or toward the pinned point to decrease its size.

3. **Hold** down the left mouse button and point to the spot to which you wish to stretch the rectangle.

4. **Release** the left mouse button. The size of the rectangle should be adjusted.

In the following exercise, you adjust the size of a line using <STRETCH>. Remember to select the end you designate to be the guiding point and stretch it from that point.

1. Select one end of the line.

2. **Press** the function key corresponding to <STRETCH>.

3. **Hold** down the left mouse button and move the pointer to the new end of the line.

4. **Release** the left mouse button. The size of the line should be adjusted.

Using <MAGNIFY>

The function key corresponding to <MAGNIFY> makes an object larger or smaller (in the case of lines, longer or shorter). It does not change the object's shape the way <STRETCH> can. (Figure 8)

Figure 8 **Magnifying a graphic object**

A triangle as entered directly to the frame

The same triangle made smaller

The same triangle magnified. The sides remain proportionate to one another.
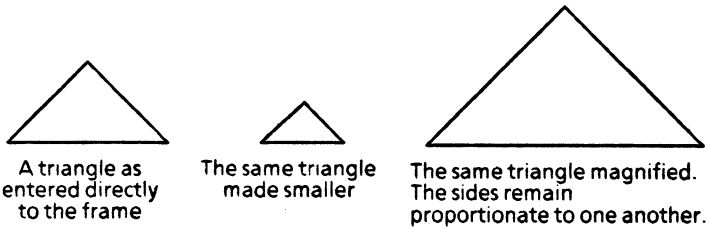
To make an object larger or smaller, select the object, press <MAGNIFY>, and select the destination. For example, if you select a point that is 1 inch from the object, the entire object is enlarged by 1 inch.

In the following exercise, you use the function key corresponding to <MAGNIFY> to enlarge an object.

NOTE: Be sure that an object is in the graphic frame in the practice document. If not, enter one using the basic graphics transfer document or the special graphic keyboard.

1. **Select** a graphic object in your practice document.

2. **Press** the function key corresponding to <MAGNIFY>.

3. **Hold down** the left mouse button.

4. **Move** the pointer around in various directions, while continuing to hold down the mouse button.

5. **Select** a destination away from the object's pinned point to make it bigger.

6. **Release** the left mouse button. The object is larger with the shape remaining intact.

7. **Close** practice document GR PR 2-1.

Deleting a graphic object

Graphic objects are deleted in the same way that text is deleted. To delete a graphic object, select it and press <DELETE>.

In the following exercise, you select one of the rectangles in your practice document and delete it.

1. **Select** one of the rectangles.

2. **Press** <DELETE>. The rectangle is deleted.

NOTE: There is no prompt for confirmation when an delete object within frames is deleted. Refer to the chapter titled "Electronic Desktop" in the "Xerox ViewPoint" training guide for more information on <DELETE>.

Summary

In this section you studied how to:

- Enter graphic objects into a graphic frame withinin a document using the basic graphics transfer document

- Enter graphic objects into a graphic frame within a document using the special graphic keyboard

- Adjust the size of an object using <STRETCH> and <MAGNIFY>

- Manipulate objects within a graphic frame using <MOVE and <DELETE>

If you need more practice, complete the exercises again. To do this, use a new copy of the practice document for this section.

4.   Drawing lines

Overview

In this section, straight and curved lines are drawn using <LINE> and <CURVE>.

After completing this section, you should be able to draw straight and curved lines, as well as start a line or curve at the end of an existing one.

Using <LINE>

To draw straight lines inside a graphic frame, use the function key corresponding to <LINE> (<UNDERLINE> on the standard keyboard).

To draw a line, select the starting point for the line in a graphic frame and press the function key corresponding to <LINE>. A blinking caret appears at the point selected. When <LINE> is pressed, the blinking caret becomes an X. You then indicate the position of the other end of the line by holding down the left mouse button, moving the pointer, and then releasing the mouse button where you want the line to end.

In the following exercise, you create a box by drawing four connecting lines.

1. **Open** practice document GR PR 4-1.

2. **Select** [EDIT] in the document window header.

3. **Select** any blank area in the graphic frame. The blinking caret appears.

4. **Press** <LINE>. The caret becomes an X.

5. **Hold down** the left mouse button and move the pointer down approximately 1 inch. A line is being drawn as you move the pointer. Adjusting the position of the pointer before releasing the mouse button makes the line straight.

6. **Release** the mouse button at the desired length. The end of the line contains a blinking caret.

7. **Press** the function key corresponding to <LINE> again.

8. ˅ **Hold down** the left mouse button and move the pointer to the right approximately 1 inch.

9. **Release** the mouse button.

10. **Press** the function key corresponding to <LINE> again.

11. **Hold down** the left mouse button and move the pointer up approximately 1 inch.

12. **Release** the mouse button.

13. **Press** the function key corresponding to <LINE> again.

14. **Hold down** the left mouse button and move the pointer to the left approximately 1 inch to finish the box.

15. **Release** the mouse button. A box should now be in your graphics frame in the practice document.

    NOTE: To adjust the length or orientation of a line once you have released the mouse button, re-select the line, press the function key corresponding to <STRETCH> or <MAGNIFY>, and adjust the line using the pointer. To straighten the line, use the function key corresponding to <STRETCH>.

Using <CURVE>

Curved lines are drawn using the function key corresponding to <CURVE>. The location of this special function key appears on the screen when a point inside the graphic frame is selected.

To draw a curved line, select a starting point for the curve in the graphic frame with the pointer, and then press the function key corresponding to <CURVE>. An X appears at the starting point. Then, hold down the left mouse button and select the apex of the curve, just above where the actual peak of the curve should be.

When the mouse button is released, the caret is placed at the apex of the curve. Another X appears at this spot (Figure 9).

Figure 9 **Drawing a curve**

Release → X
mouse
button at
apex
                          X ← Select
                              starting
                              point
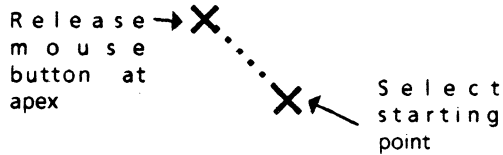
Figure 10 shows the resulting curve. The apex of the curve is above the actual peak of the curve.

Figure 10 **Completed curve**

Apex of curve ───────────→
Peak of curve ─────→
Other end of the curve →
Start ↑
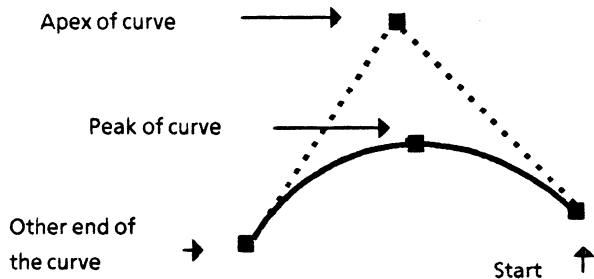
To complete the curve, indicate the position of the other end of the curve by holding down the left mouse button, positioning the pointer, and then releasing the left mouse button. (Figure 10)

NOTE: The dotted lines in Figure 10 represent the path followed by the pointer to create the curved line that appears below it.

In the following exercise, you draw curved lines using the function key corresponding to <CURVE>.

1. **Select** any blank area in the second graphic frame in practice document GR PR 4-1. A flashing caret appears at the spot that was selected.

2. **Press** the function key corresponding to <CURVE>. An X appears.

3. **Hold down** the left mouse button and move the pointer to the apex of the curve.

4. **Release** the mouse button. Another X appears and the apex becomes the pinned point. The curve created can be drawn in any direction and extended as far as the boundaries of the graphic frame.

5. **Move** the pointer to the point at which you want the curve to end.

6. **Release** the mouse button. A curved line is drawn between the starting and ending points.

   NOTE: When the button is released, the graphic caret is placed at the end of the new curve, allowing another line or curve tobe attached to the one just made.

7. **Press** the function key corresponding to <CURVE> again.

8. **Move** the pointer to the apex of the second curve.

9. **Release** the mouse button. An X appears where the mouse button was released.

To draw a second curved line from the end of the first curved line:

10. **Hold down** the left mouse button and move the pointer to the place you want the curve to end.

11. **Release** the left mouse button.

   NOTE: To adjust the length or orientation of the curve, select the end you wish to adjust and press the function key corresponding to <STRETCH> or <MAGNIFY>.

12. **Close** practice document GR PR 4-1.

Summary

In this section, you studied how to :

● Draw straight and curved lines using <LINE> and <CURVE>

● Start another line or curve at the end of an existing or newly completed line or curve.

If you need more practice, complete the exercises again. To do this, use a new copy of the practice document for this section.

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5.   Progress check

You have practiced retrieving and manipulating graphic frames and graphic objects. Now you are ready to try it on your own. If you need assistance with any of the procedures, turn to page 30 for detailed instructions.

Open progress check document GR PC 5-1 and select [EDIT]. You are going to create an organization chart like the one in Figure 11.

Figure 11 **Organization Chart**
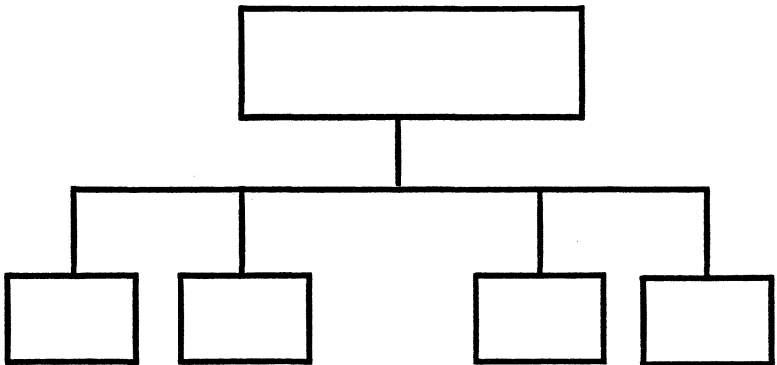
1. Insert a graphic frame in your practice document and enlarge it as necessary.

2. Place a text frame inside the graphic frame.

3. Copy and enlarge or reduce the text frame as necessary to create the organization chart.

4. Draw lines connecting the text frames so that your illustration resembles the organization chart in Figure 11.

Close practice document GR PC 5-1 when this progress check is completed.

Answers to progress check

1. To insert a graphic frame in your practice document and enlarge it as necessary:

    Open the practice document.

    Select [EDIT] in the practice document window header.

    Select [SHOW STRUCTURE]

    Select the place in your practice document where you wish to enter the frame.

    Hold down <KEYBOARD>.

    Press the function key corresponding to <SPECIAL>.

    Press the key corresponding to the graphic frame (<A> on the standard keyboard).

    Release <KEYBOARD>.

    Select the bottom of the graphic frame.

    Press the function key corresponding to <STRETCH>.

    Hold down the mouse button and move the pointer down several inches.

    Release the mouse button.

    Select and stretch the side of the graphics frame in the same manner, making the frame approximately the same size as the frame in Figure 11.

    Select [PAGINATE] in the document window header.

2. To place a text frame inside the graphic frame:

    Using the basic graphic transfer document:

    Open the basic graphic transfer document.

    Select the text frame.

    Press <COPY>.

Hold down the left mouse button.

Position the pointer on a destination inside the graphic frame.

Release the left mouse button.

Close the basic graphic transfer document.

Using the special graphic keyboard:

Position the caret inside the graphic frame.

Display the special graphic keyboard.

Press and hold down <KEYBOARD>.

Press the function keys corresponding to <SPECIAL> and <SHOW>.

Select the text frame on the display keyboard with the mouse button.

Release the mouse button.

Select [CLOSE] in the keyboard window header.

3. **To copy and enlarge or reduce the text frame as necessary to create an organization chart:**

Select the text frame you just copied into your graphic frame.

Press <COPY>.

Select a destination at the top of the frame with the mouse.

Use the function key corresponding to <STRETCH> to stretch the copied text frame to the same size as the rectangle in the top of the organization chart in Figure 11.

Select the original text frame in the practice document.

Press <COPY> and select a destination with the mouse.

Repeat this procedure three times, creating a total of five text frames in the practice document.

Move the four small text frames so that they are arranged approximately 2 inches below the top text frame. Place them to resemble the layout of text frames in Figure 11.

4. **To draw lines connecting the text frames so that your illustration resembles the organization chart in Figure 11.**

Select the bottom center of the uppermost text frame in the graphic frame.

Press the function key corresponding to <LINE>.

Hold down the left mouse button and move the pointer down approximately 1 inch.

Release the mouse button.

Draw a horizontal line from the end of the first vertical line approximately 2 inches to the right side.

Repeat this on the left side.

Draw lines from the horizontal line down to the center of each small rectangle, as follows:

Select the place on the horizontal line, above the center of each rectangle.

Press the function key corresponding to <LINE>

Hold down the left mouse button and move the pointer down to touch the top of each of the smaller rectangles.

Release the left mouse button.

Close progress check GR PC 5-1.

6.   Changing graphic object properties

Overview

Once graphic objects are entered into a graphic frame, their appearance can be customized. One way this is done is to use the individual object's property sheet. Another way to change properties is to use <SAME>.

After completing this section, you should be able to change the texture, shading, and line structure of graphic objects while stretching or contracting them, and to copy properties from one object to another.

Graphic object properties

The appearance of a graphic object or a line can be changed by setting various options on the object's property sheet.

The property sheet is displayed by selecting the object and pressing <PROP'S>.

Each graphic object has its own property sheet with specific shading and texture options available. (Figure 12)

Figure 12 Shading and texture options
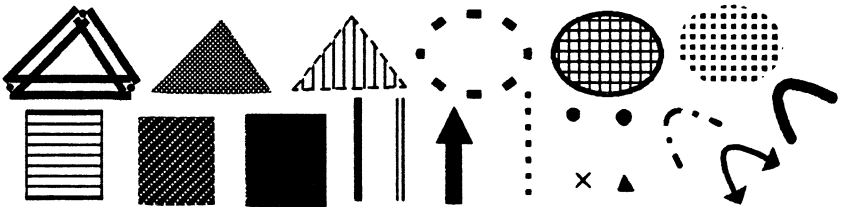
NOTE: Lines, curves, and points do not have shading options.

In the following exercise, you change the appearance of objects.

1. **Open** GR PR 6-1 and **select** [EDIT].

2. **Select** any object inside the graphic frame.

3. **Press** <PROP'S>. A property sheet for the object is displayed on the screen.

4. **Select** a different shading option for the selected object on the property sheet.

5. **Select** [APPLY] in the property sheet window header to apply the changes to the object you selected.

6. **Select** [DONE] to close the property sheet.

7. **Select** another object and press <PROP'S>

8. **Select** another option for the selected object's line width.

9. **Select** [DONE].

Using [FIXED SHAPE]

Selecting [FIXED SHAPE] retains the current shape of an object. For example, a square shape remains a square even if you stretch it to a larger size.

In the following exercise, you stretch an object after selecting [FIXED SHAPE] on the property sheet.

1. **Select** the square in GR PR 6-1.

2. **Press** <PROP'S>.

3. **Select** [FIXED SHAPE].

4. **Select** [DONE] to both apply the change and close the property sheet.

5. **Select** the side of the rectangle whose properties you just changed.

6. **Press** the function key corresponding to <STRETCH>.

7. **Hold down** the left mouse button and move the pointer approximately 1 inch from the rectangle.

8. **Release** the left mouse button.

NOTE: The rectangle is larger than before but its shape remains intact. It looks like a square.

9. **Close** GR PR 6-1.

NOTE: [FIXED ANGLE] may be selected for lines in the same manner as it is selected for shapes, such as triangles, and rectangles, etc. Refer to the sub-tab titled "Basic Graphics" in the VP Series Reference Library for more information on setting graphic properties.

Using <SAME>

<SAME> allows the properties of one graphic object to be copied to another, in the same way it is used to copy text properties in a document.

This is done by selecting the object whose properties are to be changed, pressing <SAME>, and selecting a second object that has the desired properties.

NOTE: Only the specific properties that apply to a given object are copied.

In the following exercise, you use <SAME> to change the properties of the line and plain triangle.

1. **Open** GR PR 6-2, and **select** [EDIT].

2. **Select** the plain triangle in the graphic frame.

3. **Press** <SAME>.

4. **Select** the striped ellipse.

The triangle appears as follows:

5. **Select** the line in the graphic frame.

6. **Press** <SAME>.

7. **Select** the triangle with the wide lines. Only the properties pertaining to the line are copied.

8. **Close** GR PR 6-2.

Summary

In this section, you have studied how to:

● Change the appearance of a graphic object, by selecting various options on the object's property sheet

● Retain the shape of a graphic object by selecting [FIXED SHAPE] on its property sheet

● Use <SAME> to copy properties from one graphic object to another

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

7. Changing frame properties

Overview

Anchored frames are entered using the special keyboard. *Embedded frames*, which must exist inside a graphic frame, are copied from the basic graphics transfer document or entered using the special graphics keyboard. Anchored and embedded frames, both graphic and text, can have certain properties changed.

After completing this section, you should be able to change the properties of anchored and embedded graphic and text frames, including changing border style, aligning frames on a page, and entering captions. Additionally, you should be able to enter text after a frame and use the grid as an aid in placing objects in a graphic frame.

Graphic frame properties

The graphic frame property sheet allows you to select the frame's alignment and placement on a page, add captions to illustrations, and use the grid to line up objects in your document.

Embedded graphic and text frames

Embedded graphic and text frames, located both in the basic graphics transfer document and on the special graphic keyboard, are entered into an anchored graphic frame. Embedded frames must exist inside anchored frames.

Figure 13 **Anchored and embedded frames**
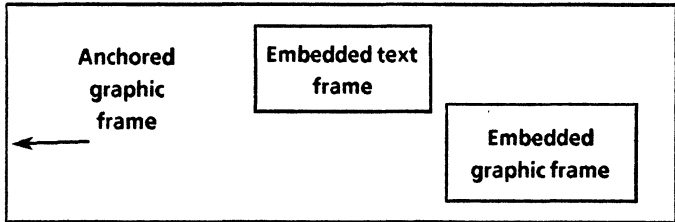
Embedded graphic frames can contain graphic objects and text frames. However, the graphic frame itself cannot be shaded or textured like other graphic objects. They can appear opaque rather than transparent and can be used for special effects when placed on top of other graphic objects. Refer to the tab titled "Basic Graphics" in the VP Series Reference Library for more information.

Embedded text frames are used to enter text in illustrations. This is discussed in Section 8.

In the following exercise, you display the property sheet for an embedded graphic frame and note the options available.

1. **Open** GR PR 7-1 and **select** [EDIT].

2. **Select** the embedded graphics frame within the anchored graphics frame.

3. **Press** <PROP'S>.

   NOTE: The various options available for embedded graphic frames are the same for the embedded text frame property sheet.

4. **Select** [DONE] to close the property sheet.

Anchored graphic and text frames

All graphic illustrations must exist within the boundaries of an anchored graphic frame. The anchor, which is only visible when [SHOW STRUCTURE] is selected, can be seen directly above the frame and is used to determine the placement of the frame on a page.

In the following exercise, you display the property sheet for an anchored graphic frame and note the options available.

1. **Select** the anchored graphic frame in your practice document.

2. **Press** <PROP'S>.

   Notice the various options available for anchored frames. The alignment properties are unique to anchored frames.

3. **Select** [DONE] to close the property sheet.

Frame border options

The options for [BORDER WIDTH] and [BORDER STYLE] control the appearance of a graphic frame.

When [NONE] is selected for Border Style, the border does not show on the screen and it does not show in a printed document.

NOTE: The border shows on the screen if an object in it is selected or if [SHOW STRUCTURE] is selected in the document auxiliary menu.

In the following exercise, you change the properties of an embedded graphic frame.

1. **Select** the embedded graphic frame inside the anchored graphic frame in GR PR 7-1.

2. **Press** <PROP'S>.

3. **Select** a wider line next to the Border Width option on the property sheet.

4. Select a dotted Border Style option on the property sheet.

5. Select [DONE]. The frame has a wide, dotted border style.

Width and height options

The Width and Height options are used to specify the frame's dimensions as either fixed or varying. When [VARYING] is selected, the frame can be stretched to the margins on the page. When [FIXED] is selected, the units specified on the property sheet determine the frame's dimensions.

Alignment options

When a document is layed out, it is useful to be able to specify where illustrations should be placed on a page. For example, you may want a frame to be in the upper righthand corner, centered on a page, or following the text.

The alignment options on the anchored graphic frame's property sheet determine where a graphic frames is placed on a page.

Horizontal alignment

The horizontal Alignment option allows a frame to be placed flush with the left or right page margins or centered in a document. (Figure 14)

Figure 14 **Horizontal Alignment options**

FLUSH LEFT   FLUSH RIGHT   CENTERED
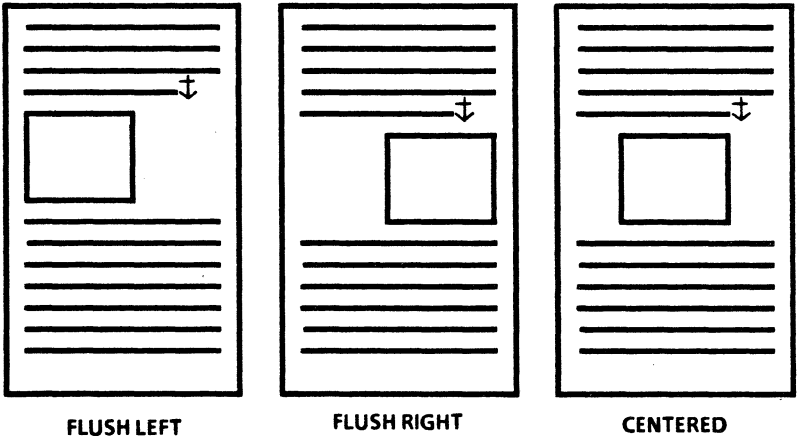
Vertical alignment

The Vertical Alignment option allows a frame to be placed flush at the top or flush at the bottom of a page. Selecting floating allows it to appear at any point on the page, next to its anchor. (Figure 15)

Figure 15 Vertical alignment options

FLUSH TOP   FLUSH BOTTOM   FLOATING
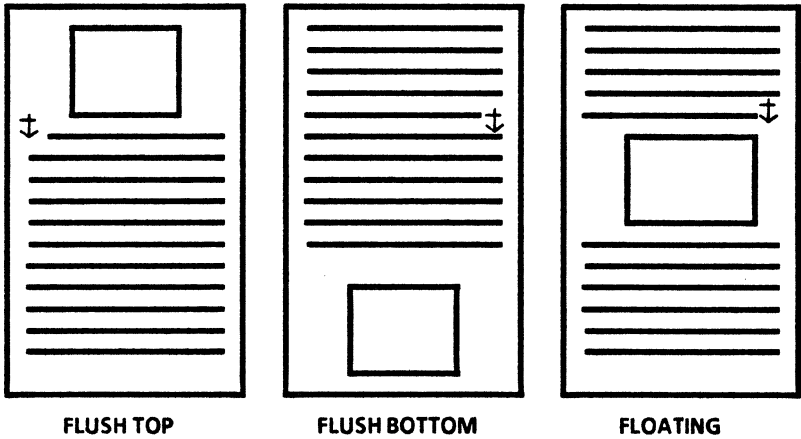
NOTE: The Vertical Alignment option is not applied to the frame until the document is paginated.

In the following exercise, you change the alignment properties for an anchored graphic frame.

1. Select the anchored graphic frame in GR PR 7-1.

2. Press <PROP'S>.

3. Select [FLUSH LEFT].

4. Select [FLUSH TOP].

5. Select [DONE] .

6. Paginate the practice document. The options selected have been applied.

7. Select [CLOSE].

[SPAN]

[SPAN] only appears when either [FLUSH TOP] or [FLUSH BOTTOM] is selected on the property sheet. This option controls whether or not a frame will span the entire width of a page or be limited to a column on a page. Refer to the sub-tab titled "Basic Graphics" in the VP Series Reference Library for more information on alignment of graphics.

Entering text after a frame

To enter a new paragraph of text after a frame in a document , the frame anchor must be displayed. This is done by selecting [SHOW STRUCTURE] in the document auxiliary menu. After the anchor is selected, press <RETURN> and enter the desired text. The text does not appear after the frame until the document is paginated.

In the following exercise, you enter text after a graphics frame in your document.

1. **Open** GR-PR 7-2, and select [EDIT].

2. **Select** [SHOW STRUCTURE].

3. **Select** the anchor for the graphic frame.

4. **Press** <RETURN>.

5. **Type** about two lines of text.

6. **Paginate** the document. The text appears after the graphic frame in the practice document.

Entering captions

A graphic frame has a caption option that allows labels or captions to be entered in the margin area outside the frame.

The Caption option controls whether or not a caption (text) is to be entered in the corresponding margin. The Margin option is used to determine the size of the margins around the frame. The size of the margins determines how much text can be entered into the corresponding caption.

To enter a caption, display the frame's property sheet, select one or more captions (top, bottom, left, or right), and then enter the amount of space required for each caption in the Margin options. These options must be entered before you can enter a caption for a frame.

NOTE: The default units used for indicating margin size are inches. This can be changed, however, on the Units menu.

Once the property sheet is closed, select in the appropriate area outside the frame and enter the desired caption.

In the following exercise, you insert captions in a graphic frame.

1. Select the frame in GR PR 7-2.
2. Press <PROP'S>.
3. Select the Caption options [TOP] and [LEFT].
4. Enter 0.5 in the corresponding Margin options.
5. Select [DONE].
6. Select to the left of the frame.
7. Type: This is the left caption area.
8. Select above the frame.
9. Type: This is the top caption area.

Using the [GRID] option

The grid option is helpful in drawing lines and lining up objects within graphics frames. Various grid styles and spacings are available (Figure 16).

Figure 16 Examples of grid styles and spacing
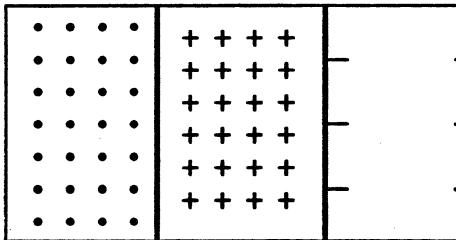
The grid can be turned on either by selecting inside the frame and pressing the function key that corresponds to <GRID>, or by selecting [GRID] on the graphic frame property sheet.

Pressing the function key that corresponds to <GRID> gives you the default 8 size spacing setting. This size spacing can be changed only on the graphic frame property sheet.

NOTE: Grid marks do not appear in printed documents.

In the following exercise, you select grid options on the property sheet for an anchored graphic frame. Document GR PR 7-2 should still be open.

1. Select the anchored frame.

2. **Press <PROP'S>.**

3. Select [GRID] on the property sheet.

4. **Select** the [ON] position for [GRID].

   When [ON] is selected, the Grid Style and Grid Spacing options appear.

   Grid Style options consist of tick marks along the frames border, or dots or plus marks at every grid point across the frame.

   Grid Spacing options are evenly spaced markings from 4 to 32 screen dots apart.

   When the grid is on, the control points on graphic objects align to the nearest grid point in the frame. When the grid is off, objects can be positioned anywhere in the frame.

5. **Select** a grid style and spacing.

6. **Select** [APPLY].

   The options selected have been applied to the frame.

7. **Select** [DONE].

8. **Select** [CLOSE] on the document.

Summary

In this section, you studied how to:

- Select anchored and embedded text frames, and display their properties

- Change properties on the frame property sheet, including selecting a border style, aligning the frame on the page, and entering a caption

- Enter text after a frame

- Use the grid as an aid in placing objects in a graphic frame

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

8.   Using text frames

Overview

In this section, you place text in a text frame. Text in a text frame has all the properties of any other text in a document. Characters can be in any typeface (boldface, italics, and so forth). The contents of a text frame are considered to be in paragraphs, with paragraph properties (such as centering and justification) available.

After completing this section, you should be able to insert embedded and anchored text frames into a document, change the properties of both types of frames, and enter footnotes in a document using anchored text frames.

Embedded text frames

An embedded text frame is entered from the basic graphics transfer document or the special graphic keyboard. It must reside inside an anchored graphic frame. An embedded text frame differs from an embedded graphic frame in that it can only contain text, not graphics.

In the following exercise, you insert an embedded frame within a graphic frame in practice document GR PR 8-1.

1. Open GR PR 8-1 and select [EDIT].

2. Open the basic graphics transfer document.

3. Select the text frame in the basic graphics transfer document.

4. Press <COPY>.

5. Select a place in the graphic frame in the practice document in which to copy the text frame.

6. **Close** this document.

Embedded text frame properties are similar to those of anchored text frames, with the exception that they have no alignment options.

Anchored text frames

Anchored text frames are similar to anchored graphic frames in that they are entered from the special keyboard and they can exist outside of another frame in your document.

Anchored text frames can contain only text. They cannot contain graphic objects, graphic frames, or text frames.

To enter an anchored text frame, select a place in the document, hold down <KEYBOARD>, press the function key corresponding to <SPECIAL>, press the key corresponding to the text frame (<S> on the standard keyboard), and release <KEYBOARD>.

In the following exercise, you insert an anchored text frame and open its property sheet.

1. **Open** GR PR 8-2 and select [EDIT].

2. **Select** [SHOW STRUCTURE] in the document auxiliary menu.

3. **Select** the last character in the second paragraph.

4. **Hold down** <KEYBOARD>.

5. **Press** the function key corresponding to <SPECIAL>.

6. **Press** the key corresponding to the text frame (<S> on the standard keyboard). An anchored text frame is inserted into the document.

7. **Release** <KEYBOARD>.

8. **Paginate** the document. An anchored text frame is inserted below the second paragraph.

9. **Press** <PROP'S>. The text frame property sheet is displayed.

   NOTE: Text frame options are similar to those on the graphic frame property sheet. Both graphic and text frames have varying and fixed height and width options. Text frames do not have a grid option.

10. **Close** this document.

Footnotes in documents

Footnotes can be created in documents by using an anchored text frame with the option [FLUSH BOTTOM] selected for alignment.

NOTE: Footnotes may also be entered by selecting [FOOTING] on the page layout property sheet. This method is convenient if, for example, a footing already exists in a document, or if the footing is very large. Refer to the "Document Creation" chapter of the "VP Document Editor" training guide for detailed instructions.

Once the frame is entered, stretch it to the desired size, select the appropriate options on the property sheet, and then enter the footnote.

In the following exercise, you enter a footnote.

1. **Open** GR PR 8-3 and **select** [EDIT].

2. **Select** the last word in the first paragraph.

3. **Hold down** <KEYBOARD>.

4. **Press** the function key corresponding to <SPECIAL> and **press** <S>.

5. **Release** <KEYBOARD>. The frame appears in the first available space below its anchor.

   NOTE: In order for the frame to appear in its designated place, the document must be paginated.

6. **Select** the frame and **press** <PROP'S>.

7. **Select** [NONE] for the Border Style option.

8. **Select** the [FLUSH BOTTOM] Alignment option.

9. **Select** the Span [PAGE] option.

10. **Select** [DONE] on the property sheet.

    NOTE: Once the border has been turned off, the frame is not visible unless [SHOW STRUCTURE] is selected or the inside of the frame is selected.

11. **Stretch** the text frame to span the width of the page.

12. **Select** inside the frame.

13. **Enter** the following text:

    Albert H. Marckwardt, *American English* (New York: Oxford University Press, 1958), p. 94.

14. **Paginate** the document. The footnote appears at the bottom of the page.

    NOTE: If a bottom page margin is set, the footnote will appear above the page margin.

15. **Close** this document.

Summary

In this section, you have studied how to:

● Enter an embedded text frame in a graphics frame

● Insert an anchored text frame

● Enter a footnote in a document using an anchored text frame

● Change the properties of anchored and embedded text frames

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

9.　　　Graphic clusters

Overview

The size or location of an illustration containing many graphic objects can be changed at one time. This ensures that each object is enlarged by the same amount and that it stays intact when it is moved. To manipulate several objects as one group, they must all be selected. Once they are selected, they can be used as a group temporarily or joined into a graphic cluster, which keeps them intact for future use.

After completing this section, you should be able to select and manipulate graphics objects using the select-adjust and draw-through methods, create graphic clusters, and change the properties of graphic clusters.

Multiple selection

Multiple selection provides the ability to manipulate several graphic objects at one time. There are two methods for selecting multiple objects. One is the select-adjust method and the other is the draw-through method.

Select-adjust method

To use the select-adjust-method, the first object is selected with the left mouse button and each additional object is selected with the right mouse button. An object is deselected by positioning the pointer on the object and clicking the right mouse button.

In the following exercise, you select multiple graphic objects using the select-adjust method.

1. **Open** GR PR 9-1 and **select** [EDIT].

2. **Select** the triangle, with the left mouse button.

3. **Select** the rectangle, with the right mouse button. This adds the rectangle to the selection.

4. **Select** the left circle with the right mouse button.

5. **Select** the right circle with the right mouse button.

6. **Press** <MOVE>.

7. **Select** a destination for the objects and hold down the left mouse button until the objects line up in the location selected.

8. **Release** the left mouse button.

NOTE: The guiding point for the group of objects is determined by the last object that is selected.

Draw-through method

When the draw-through method is used, the objects to be selected are indicated by drawing a diagonal line though the area to be selected.

To use the draw-through method to select a group of objects, select the first object with the left mouse button and position the pointer above and to the left of the objects to be selected. Hold down the right mouse button and move the pointer down and to the right (diagonally). Release the right mouse button when all the objects you wish to select are included in the box that is drawn around them. Objects that are completely within the box are selected and their control points are highlighted.

Figure 17 illustrates the draw-through method.

Figure 17 Draw-through method of selection
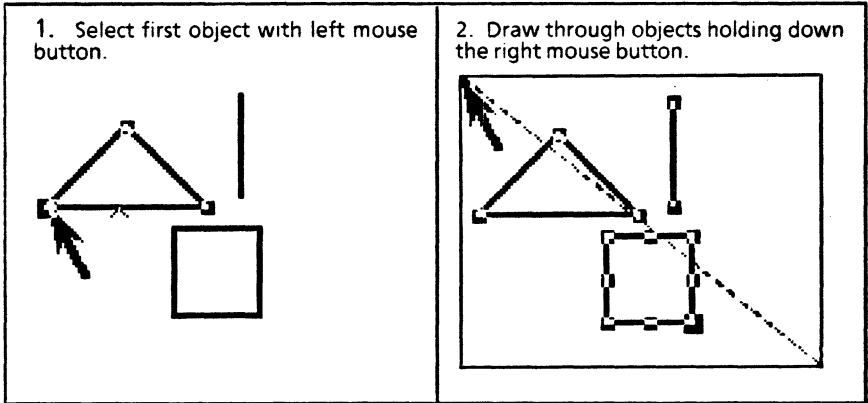
1. Select first object with left mouse button.	2. Draw through objects holding down the right mouse button.

In the following exercise, you select multiple graphic objects using the draw-through method. GR PR 9-1 should still be open. If it is not, open it now and select [EDIT].

1. **Select** the triangle, using the left mouse button.

2. **Position** the pointer above and to the left of the objects to be selected.

3. **Hold down** the right mouse button and **move** the pointer down and to the right (diagonally).

4. **Release** the right mouse button when all the objects you wish to select are included in the box that is drawn around them. All the objects are now selected as one item.

5. **Press** <COPY>.

6. **Select** a destination for the objects and **hold down** the left mouse button until the objects line up in the location selected.

To remove an object from the draw-through selection, select it with the right mouse button. If more objects are to be added to the draw-through selection, either make more draw-through selections, or select unselected objects with the right mouse button to add them.

Using the multiple selection property sheet

After making a multiple selection, the properties of the objects can be changed in the selection using the extended property sheets. Property sheets are displayed for all the objects included in the selection. For example, if the selection includes a line, point, rectangle, and triangle, the property sheets pertaining to these objects are displayed.

The property sheets are displayed by making a multiple selection and pressing <PROP'S>. The properties are selected as on any other property sheet.

In the following exercise, you change the properties of an object in a multiple selection. Practice document GR PR 9-1 should still be open on your desktop.

1. **Select** the objects in the graphic frame, using multiple selection.

2. **Press** <PROP'S>. The graphics property sheet is displayed. [SHAPE] and [FRAME] should be displayed in the Display line.

   NOTE: The shape property sheet displays options for the different shapes in the multiple selection. whereas the frame property sheet displays the options for the frame.

3. **Select** a darker shading on the shape property sheet, which should be displayed.

4. **Select** [DONE]. Just the shading for the triangle and the two circles was changed.

   NOTE: The rectangle is a graphics frame. Its properties can only be changed by selecting [FRAME] in the display line.

Creating graphic clusters

Creating a graphic cluster makes a multiple selection permanent. This can be useful for copying or moving a complex illustration and for use in future documents. For example, you may have painstakingly created an illustration from many small objects that you want to use (move, copy, magnify) as one unit. It is possible to to join these small objects together using multiple selection and the function key corresponding to <JOIN>.

A cluster is created by selecting all the objects to be together and pressing the function key corresponding to <JOIN>.

The objects already in a cluster are split by selecting any object in the cluster and pressing the function key corresponding to <JOIN>. Once they are split, the objects can again be selected individually.

In the following exercise, you create and split a cluster. Practice document GR PR 9-1 should still be open on your desktop.

1. **Select** all the objects in the frame, using the draw-through method.

2. **Press** the function key corresponding to <JOIN>.

3. **Move** the pointer out of the document.

4. **Click** the left mouse button. The objects are no longer selected.

5. **Select** any object in the frame. The whole cluster is selected.

6. **Press** <MOVE>.

7. **Select** a destination.

To split a cluster:

8. **Select** the cluster by clicking on any object.

9. **Press** the function key corresponding to <JOIN>. The cluster is split into individual objects.

10. **Select** one of the circles. Only the circle is selected. The objects must be selected individually.

11. **Close** GR PR 9-1.

For more information on multiple selection and graphic clusters, refer to the sub-tab titled "Basic Graphics" in the VP Series Reference Library.

Summary

In this section, you have studied how to:

- Select and manipulate multiple graphic objects using the select-adjust method

- Select and manipulate multiple graphic objects using the draw-through method

- Create graphic clusters using the function key corresponding to <JOIN>

- Change the properties of multiple selected objects

If you need more practice, complete the exercises again. To do this, use a new copy of the practice document for this section.

After you finish the final progress check that follows, you will have completed the training for graphics. Refer to the sub-tab titled "Basic Graphics" in the VP Series Reference Library for further information on this feature.

10.   Progress check

You have practiced inserting and manipulating graphic and text frames in a document, and entering and manipulating graphic objects, and text within these frames. Now you are ready to try it on your own by creating a chart like the one shown here. If you need assistance with any of the procedures, turn to page 60 for detailed instructions.

Figure 18 Residential construction in Cedar County

Each house represents 10,000 houses

The year: **1981   1982   1983   1984**
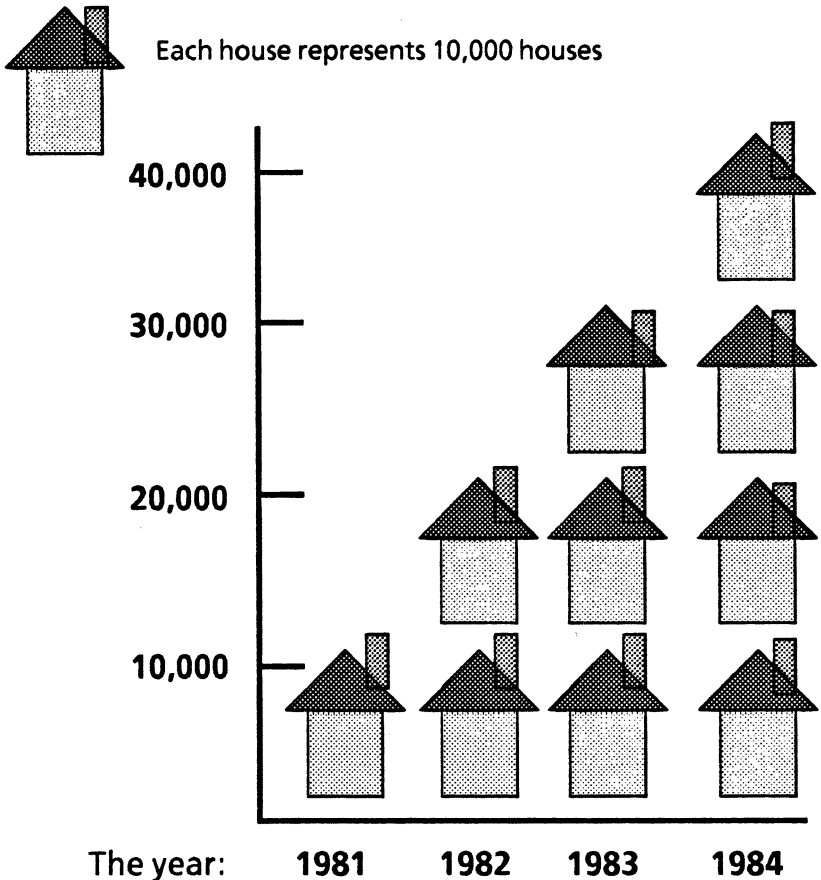
Open GR PC 10-1and select [EDIT]. You are going to create an illustration similar to the one in Figure 18:

1. Insert and stretch a graphic frame.

2. Display the property sheet for the graphic frame, select [GRID], and close the property sheet.

3. Draw the two lines (creating a right angle) shown in the illustration using the function key corresponding < LINE >. (Use the grid to line up the lines you draw.)

4. Draw one of the short lines (that appear on the vertical line), using the function key corresponding to <LINE>, and copy it to the correctly spaced locations.

5. Open the basic graphics transfer document and copy the shapes needed to create this illustration: a triangle and a rectangle.

6. Use the function key corresponding to <STRETCH> to make the rectangles approximately the same size as the rectangles in the diagram.

7. Use the function key corresponding to <MAGNIFY> to shrink the triangle to the correct size.

8. Select the objects and use their property sheets to change their shading properties to match the houses in the illustration.

9. Use <MOVE> to create one house out of rectangles and the triangle.

10. Use multiple selection (either select-adjust or draw-through) and the function key corresponding to <JOIN> to make a cluster of the objects creating the house.

11. Use <COPY> to make 10 copies of the house as shown.

12. Copy text frames from the basic graphics transfer document for the areas containing text.

13. Use the function key corresponding to <STRETCH> to make the long text frames longer; then stretch one of the small text frames to the approximate size and copy it three times.

14. Enter text in the text frames, as shown in Figure 14.

15. Use the text frame property sheet to turn off the border for the frames.

16. Display the anchored graphic frame property sheet and enter 0.5 for the bottom caption; then select the border width and style you wish.

17. Turn off the grid on the property sheet and close it.

Close GR PC 10-1 when you have completed this progress check.

Answers to progress check

The numbers in parentheses indicate the section in which you will find details on each procedure.

1. **To insert and stretch a graphic frame: (2)**

   Select inside the document.

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press the key corresponding to the graphic frame (<A> on the standard keyboard).

   Release <KEYBOARD>.

   Select the graphic frame.

   Press the key corresponding to <STRETCH>.

   Holding down the left mouse button, move the pointer until the frame is the desired size.

   Release the mouse button.

2. **To display the property sheet for the graphic frame, select [GRID], and close the property sheet: (7)**

   Select the graphic frame.

   Press <PROP'S>.

   Select [GRID].

   Select [ON].

   Select [DONE].

3. **To draw the 2 lines (creating a right angle) shown in the illustration using the the function key corresponding to <LINE>. Use the grid to line up the lines you draw: (4,)**

   Select a starting point for the right angle.

   Press the function key corresponding to <LINE>.

   Hold down the left mouse button and move the pointer to the end of this line.

   Release the left mouse button.

   Repeat the procedure for the second line.

4. **To draw one of the short lines (that appear on the vertical line), using the function key corresponding to <LINE>, and copy it to the correctly spaced locations: (4)**

   Select a spot on the vertical line of the right angle you created.

   Press the function key corresponding to <LINE>.

   Hold down the left mouse button and move the pointer horizontally about half an inch.

   Release the left mouse button.

   Copy this line to correctly spaced increments on the vertical line, as shown in Figure 14.

5. **To enter the shapes needed to create this illustration: (3)**

   Using the basic graphics transfer document:

   Open basic graphics transfer document.

   Select the shapes (triangle and rectangle).

   Press< COPY>.

   Select destinations for the shapes.

Using the special graphic keyboard:

Place the caret in the graphic frame.

Hold down <KEYBOARD>.

Press the function key corresponding to <SPECIAL>.

Press the function key corresponding to <SHOW>.

Press the function key corresponding to <SET>.

Select the triangle and the rectangle in the special keyboard using the left mouse button.

Select [CLOSE] on the keyboard window header.

6. Use the <STRETCH> key to make the rectangles approximately the same size as the rectangles in the diagram. (NOTE: when [GRID] is on, objects align with the nearest grid point): (2)

Select one side of the rectangle.

Press the function key corresponding to <STRETCH>.

Move the pointer inside the rectangle to shrink it.

Make the first rectangle approximately the same size as the large one in Figure 18.

Copy this rectangle and use the function key corresponding to <STRETCH> to make one as small and narrow as the rectangle used for the chimney on the house.

7. To use the function key corresponding to <MAGNIFY> to shrink the triangle to the correct size: (3)

Select the triangle .

Press the function key corresponding to <MAGNIFY>.

Move the pointer inside the triangle, until it is approximately the same size as the triangle in Figure 18.

8. **To select the objects and use their property sheets to change their shading properties to match the houses in the illustration: (6)**

   Select each object.

   Press <PROP'S>.

   Select properties to match the houses shown in Figure 18.

9. **To use <MOVE> to create one house out of rectangles and the triangle: (3)**

   Select the triangle.

   Press <MOVE>.

   Position the pointer above the rectangle.

   Hold down the left mouse button.

   Release the mouse button when the triangle is lined up.

   Repeat with placement of the rectangle used for the chimney on the house.

10. **To use multiple select (either select-adjust or draw-through method) and the function key corresponding to <JOIN> to make a cluster of the objects creating the house: (9)**

    Using the select-adjust method:

    Select the first object with the left mouse button.

    Select each additional object with the right mouse button. Deselect an object by positioning the pointer on the object and clicking the right mouse button.

    Using the draw-through method:

    Select the first object with the left mouse button and position the pointer above and to the left of the objects to be selected.

    Hold down the right mouse button and move the pointer down and to the right (diagonally).

Release the right mouse button when all the objects you wish to select are included in the box that is drawn around them. Objects that are completely within the box will be selected and their control points will be highlighted.

When all objects are selected, press <JOIN> to create a cluster.

11. **To use <COPY> to make 10 copies of the house as shown: (3)**

Select the cluster (house).

Press <COPY>.

Select a destination.

Create an illustration similar to the one in Figure 18.

12. **To copy text frames from the basic graphics transfer document for the areas containing text: (8)**

Enter a text frame from the basic graphics transfer document or the special graphic keyboard.

Press <COPY>.

Select a destination.

13. **To change the size of the text frames and copy three times: (2)**

Select each individual text frame.

Press <STRETCH>.

Move pointer to desired length.

Select individual frames.

Press <COPY>.

Select a destination.

14. **To enter text in the text frames, as shown in Figure 18: (8)**

    Select inside the text frame.

    Enter text as shown in Figure 18.

15. **To use the text frame property sheet to turn off the border for the frames: (8)**

    Select the text frame.

    Press <PROP'S>.

    Select [NONE] for border style.

16. **To display the anchored graphics frame property sheet and enter a 0.5 amount for a bottom caption, then select the border width and style you wish: (7)**

    Select the anchored frame.

    Press <PROP'S>.

    Enter 0.5 next to the bottom caption area.

    Select [BOTTOM] for caption.

    Select any border style and width.

17. **To turn off the grid on the property sheet and close it: (4)**

    Select [GRID].

    Select [OFF].

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TABLES

XEROX

VP Series Training Guide
Version 1.0

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Table of contents

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1.   Introduction

Overview

Tables enable you to present information in an easy to read, easy to understand, and visually appealing manner. Using the tables feature at your workstation, you can create tables that meet your individual needs. When a new table is entered into a document from the keyboard, it contains two rows and two columns. This basic table can be extended in a simple way by adding rows and columns, as shown in Figure 1-1.

Name	Address	Phone Number	Employee Number
Smith	23 W. St. L. A., Calif.	987-6543	5678
Jones	46 9th St. Northridge, Calif.	876-5432	5792

Figure 1-1 Adding rows and columns

The table can also be extended in a more complex way by adding subrows and subcolumns (Figure 1-2).

Name		Children		Phone Number
Last	First	Name	Age	
Smith	John	Karen	12	987-6543
		Joshua	7	
Jones	Dave	Brian	14	876-5432
		Susan	10	
		Richard	2	

Figure 1-2 **Adding subrows and subcolumns**

By making the ruling lines and the frame around a table invisible, the text can take on a basic columnar appearance, as shown in Figure 1-3.

Name	Address	Phone Number	Employee Number
Smith	23 W. St. L. A., Calif.	987-6543	5678
Jones	46 9th St. Northridge, Calif.	876-5432	5792

Figure 1-3 **Column format**

Information entered into the field-like areas of the table can consist of numerical and/or textual material. Figure 1-4 shows how a table's fields grow and expand to accommodate the textual or numerical information entered.

This row expanded to accommodate more text.		Expanded ← row

Figure 1-4 **Expanded field**

This chapter is designed to provide you with the general concepts and practice necessary to effectively create and modify tables at your workstation.

After completing this chapter, you should be able to:

● Enter a by-row or a by-column table

● Enter text in a table and change its properties

● Select and add rows and columns

● Change the width and properties of rows and columns

● Create subrows and subcolumns

● Set the fill-in order

● Use the table property sheet

Getting started

Before you begin this chapter, you should know how to operate your 6085 or 8010 workstation. Complete the following:

- "Training Introduction" tab

- "Xerox ViewPoint" self study guide

- "Document Creation" chapter in "VP Document Editor" self study guide

- "VP NetCom," "VP RemoteCom," or "VP StandAlone" self study guide, depending on the configuration of your workstation

To complete this chapter, you need a 6085 Professional Computer System or an 8010 Information System with VP Document Editor software installed and running. To verify that the software package is installed and running, open the application loader, which is located in the workstation divider of the directory. If the software package is not displayed when you open the application loader, or if its status is set to Idle, refer to the "Application Loader" chapter of the "Xerox ViewPoint" self study guide.

Additionally, you need the training disk labeled VP Training Exercises.

Each section of this chapter introduces a number of related concepts. When these concepts involve on-line practice, practice exercises are included. At the end of each section, you test your knowledge with a self check; at the end of your training, you review all the skills taught with a final progress check.

When a term that is new or unique is introduced, it is italicized and placed in boldface type. You can find a more detailed explanation of each term in the "Glossary" tab of the VP Series reference library.

To get started, you need the folder titled Tables on the VP Training Exercises floppy disk. Within the folder are all the documents necessary to complete this chapter. Three types of documents are included:

- Tables PRactice documents (for example, TA PR 2-1).

- Tables Self Check documents (for example, TA SC 2-1).

- Tables Final Progress Check (for example, TA PC 10-1).

At this point, you are ready to load the VP Training Exercises floppy disk onto your desktop. To review the procedure for loading a floppy disk, refer to the "Floppy Utility" chapter in the "Xerox ViewPoint" self study guide. If your system does not have a floppy disk drive, see your System Administrator.

You can copy the Tables folder and rename it. This automatically allows you to work with a copy of the original documents and to store your completed practices.

Beginning with this introduction, continue through each section sequentially, at your own pace, until you have mastered the skills taught. Your training should take approximately nine hours.

While you are completing this chapter, it is advisable that you have the tabs titled "VP Introduction" and "VP Document Editor" and the sub-tab titled "Tables" in the VP Series reference library available for easy referral.

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2. Entering a table

Overview

When you enter a table in a document, you have the option of entering a by-row or a by-column table. A *by-row table* is one in which text is filled in by row. A *by-column table* is one in which text is filled in by column. Whether you enter text by column or by row depends on the information you display.

After completing this section, you should be able to enter a by-row or a by-column table in a document and paginate the document to ensure proper placement of the table.

Entering a by-row and by-column table

To enter either a by-row or a by-column table, you first select a location within your document. Then, hold down <KEYBOARD>, which is located in the right function group of your keyboard. This causes the top row of function keys on your keyboard to be redefined; their new temporary meanings are displayed on your screen. Press the function key that corresponds to <SPECIAL>, and then press either <D> for a by-column table or <F> for a by-row table. Upon completion of this sequence, the appropriate table is entered.

In the following exercise, you enter a by-column and a by-row table.

1. **Open** TA PR 2-1.

2. **Select** [EDIT]

3. **Position** the caret after the last character of the words: by-column.

4. **Hold down** <KEYBOARD>, **press** the function key corresponding to <SPECIAL>, and **press** <D>.

5. **Release** <KEYBOARD>. You have just entered a table in which text will be filled in by column.

   NOTE: The table frame anchor is entered at the point at which the caret was positioned. After paginating, the frame containing the table appears in the first available space in the document below its anchor. The anchor is visible when [SHOW STRUCTURE] is selected in the document auxiliary menu.

6. **Position** the caret after the last character of the words: by-row.

7. **Hold down** <KEYBOARD>, **press** the function key corresponding to <SPECIAL>, and **press** <F>.

8. **Release** <KEYBOARD>. You have just entered a table in which text will be filled in by row. The table may not appear under the words by-row.

   At this point, there are two tables beneath the words: By-column table. In order to position these tables properly, you must paginate the document.

9. Select [PAGINATE] in the window header or the document auxiliary menu.

   NOTE: [PAGINATE] appears in the document auxiliary menu only if there is not enough room in the window header.

   Pagination ensures that the tables are positioned properly.

Look at the by-column table (Figure 2-1). Each field is numbered sequentially by column. If you enter text into this by-column table by pressing <NEXT>, the text is entered in this sequence.

Field 1	Field 3
Field 2	Field 4

Figure 2-1 **By-column table**

Look at the by-row table (Figure 2-2). Each field is numbered sequentially by row. If you enter text into this by-row table by pressing <NEXT>, the text is entered in this sequence.

Field 1	Field 2
Field 3	Field 4

Figure 2-2 **By-row table**

10. **Position** the caret in the first field under the header row in the by-column table.

11. **Press** <NEXT>. The caret moves down to the next field in the column.

12. **Press** <NEXT>. The caret moves to the first field in the second column.

13. **Position** the caret in the first field under the header row in the by-row table.

14. **Press** <NEXT>. The caret moves across to the next field in the row.

15. **Press** <NEXT>. The caret moves to the first field in the second row.

16. **Select** [CLOSE].

NOTE: Fill-in by row or by column can be changed in the table property sheet, which is discussed in Section 9.

Summary

In this section, you studied how to:

- Use <KEYBOARD>, the function key corresponding to <SPECIAL>, and <D> to enter a by-column table

- Use <KEYBOARD>, the function key corresponding to <SPECIAL>, and <F> to enter a by-row table

- Paginate a document after entering a table to ensure proper placement of the table

If you need more practice, complete the exercise again. To do this, use a new copy of the practice document for this section.

The following pages contain an optional self check exercise.

Self check 2-1

You have practiced entering a by-column and by-row table. Now you are ready to try it on your own. Open self check document TA SC 2-1 and select [EDIT]. If you need assistance in entering one or both of these tables, turn to the next page for detailed instructions.

1. Enter a by-row table after the words: By-row table.

2. Enter a by-column table after the words: By-column table.

3. Paginate the document.

Answers to self check 2-1

1. **To enter a by-row table:**

   Position the caret after the last character of the words: by-row table.

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <F>.

   Release <KEYBOARD>.

2. **To enter a by-column table:**

   Position the caret after the last character of the words: by-column table.

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <D>.

   Release <KEYBOARD>.

3. **To paginate the document:**

   Select [PAGINATE] in the window header or the document auxiliary menu.

3.   Entering text in a table

Overview

As you learned in the previous section, a by-row and a by-column table look the same when they are entered from the keyboard. The important difference is that the type of table selected determines how text is entered into it.

After completing this section, you should be able to enter text in the column headings and the table fields of a by-column and a by-row table. You already know how to edit text in a basic document, but this procedure is reviewed briefly to illustrate editing text within a table.

Entering text in column headings

The row at the top of a table is called the *header row* and contains the column headings used for labeling the columns in a table. In a newly entered table, the header row is divided from the rest of the table by a heavy dark line (Figure 3-1).
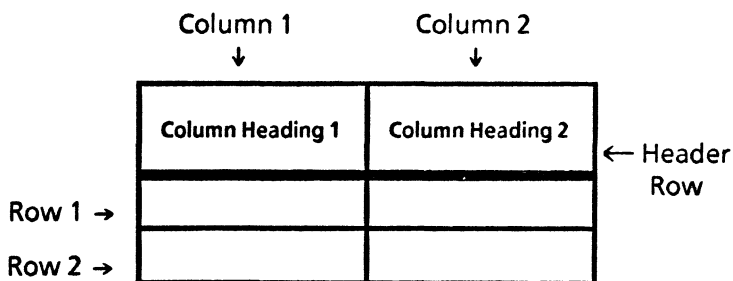
Figure 3-1 Header row

The header row has text filled into it by row, regardless of whether the table is by-column or by-row. Text can be entered into the header rows in two ways:

1. **Mouse button selection method** - Selecting inside a column heading and entering the desired text

2. **Table selection method** - Selecting the entire table and pressing <NEXT>. The caret appears in the leftmost column heading

Once the caret has been placed in the header row, <NEXT> can be used to move to subsequent column headings. When the caret is in the last column heading, <NEXT> moves the caret to the first table field.

NOTE: The caret cannot be placed in the header row from a table field by using <NEXT>.

In the following exercise, you enter text into the header row of a table using both methods.

Mouse button selection method:

1. **Open** TA PR 3-1.

2. **Select** [EDIT].

3. **Position** the caret in the left column heading of the by-row table.

4. **Type:** Name.

5. **Press** <NEXT>. The caret moves to the next column heading.

6. **Type:** Age.

7. **Press** <NEXT>. The caret moves to the first field of the table.

8. **Press** <NEXT> again. Since this is a by-row table, the caret moves to the second field of the first row.

Select frame method:

9. **Select** the by-column table frame with the left mouse button. The table is now highlighted.

10. **Press** <NEXT>. The caret appears in the left column heading.

11. **Type:** Item, **press** <NEXT>, and **type:** Cost.

12. **Press** <NEXT> twice. Since this is a by-column table, the caret moves to the second field of the first column.

    The tables in your document should look like these:

Name	Age

By-row table

Item	Cost

By-column table

13. **Select** [CLOSE].

Entering text in a table

Text is entered into a table using the same mouse button selection method. Once the caret is positioned, it can be moved by pressing <NEXT>.

NOTE: The character properties of text can be changed using the top row of function keys on your keyboard or the character property sheet.

The character properties of an entire row or column of text can be changed by selecting the row or column using the select-adjust method and pressing the appropriate function key. The line height and justification of text within a row or column can be changed by selecting the row or column using the select-adjust method, pressing <PROPS>, and selecting [TEXT] on the display line.

Refer to the "Document Creation" chapter for more details.

You have already practiced entering text into the header row. In the following exercise, you enter text into the field-like areas of the by-column table.

1. **Open** TA PR 3-1.

2. **Select** [EDIT].

3. **Position** the caret in the first field of the column labeled Item in the by-column table.

4. **Type** : Sweater.

5. **Type** the following information in subsequent fields (remember to press <NEXT>):

   Shoes

   $25.00

   $55.00

   NOTE: Since this is a by-column table, the text is entered by column.

The table in your document should look like this:

Item	Cost
Sweater	$25.00
Shoes	$55.00

By-column table

6. Select [CLOSE].

Editing and formatting text in a table

Errors made when entering text in the table field-like areas or the header row are corrected in the same way that they are corrected in a document. Text within a table can also be moved and copied in the same way as document text. For detailed information on document editing, refer to the "Document Creation" chapter.

Text entered in the header row does not take the properties of the column. Properties for the column headings are set on the header property sheet, illustrated in Figure 3-2. The header property sheet is found within the table property sheet. The table property sheet is displayed by selecting a table and pressing <PROP'S>.
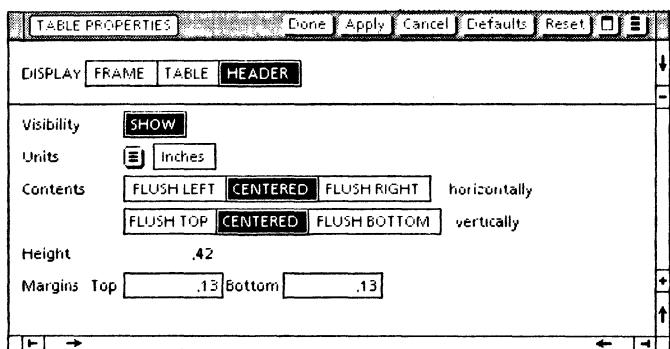
Figure 3-2 Column heading property sheet

On this property sheet, you can determine whether or not you want the column headings to be visible. (For visibility, [SHOW] should be selected.) If you decide that you want the headings visible, you can determine the positioning of the text within the headings. (For more details on the use of this property sheet, refer to the "Tables" sub-tab of the VP Series reference library.)

Summary

In this section, you studied how to:

● Enter text in the header row of a table

● Enter text in table fields

If you need more practice, complete the exercise again. To do this, use a new copy of the practice document for this section.

The following pages contain an optional self check exercise.

Self check 3-1

You have practiced entering and changing text within a table and its column headings. Now you are ready to try it on your own. Open self check document TA SC 3-1 and select [EDIT]. If you need assistance with any of the procedures, turn to the next page for detailed instructions.

1. Enter the following information in the column headings:

   Course

   Date

2. Enter the following information:

   Statistics   5/13/85

   Biology   6/9/85

Answers to self check 3-1

1. **To enter information in the column headings:**

   Position the caret in left column heading of the header row.

   Type: Course.

   Press <NEXT>.

   Type: Date.

2. **To enter the table information:**

   Press <NEXT>.

   Type: Statistics.

   Press <NEXT>.

   Type: 5/13/85.

   Press <NEXT>.

   Type: Biology.

   Press <NEXT>.

   Type: 6/19/85.

   The table in your document should look like this:

Course	Date
Statistics	5/13/85
Biology	6/19/85

   By-row table

4. Selecting a table

Overview

Unless you are creating a simple table, the two-row by two-column table first entered into your document will be inadequate. You will want to add more rows and columns to create a table that will fit your informational display needs.

After completing this section, you should be able to select and delete single and multiple rows and columns; select lines and change their properties; and select, copy, and move the entire table.

Selecting a row or column

Once you know how to select rows and columns, you can add them to or delete them from a table. In this section, you will delete them; and in the next section, you will add them to a table.

There are two methods used for selecting a row or a column. Both can be used with either a by-row or by-column table.

1. **Select-adjust method** - Select a field within the desired row or column, using the left mouse button. Select another field within the row or column of interest, using the right mouse button. The row or column common to the two fields is selected and highlighted.

Figure 4-1 illustrates how to select column 1 using the select-adjust method:

Column 1 ↓	Column 2 ↓	
		← Column Heading
Left mouse button selection (Row 1 →)		
Right mouse button selection (Row 2 →)		
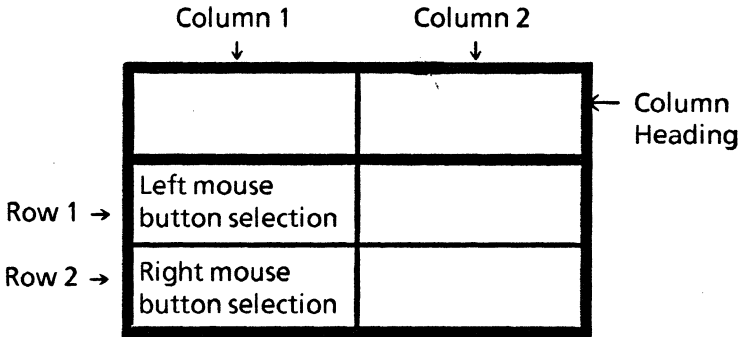
Figure 4-1 **Selecting a column**

Figure 4-2 illustrates how to select row 2 using the select-adjust method:

Column 1 ↓	Column 2 ↓	
		← Column Heading
(Row 1 →)		
Left mouse button selection (Row 2 →)	Right mouse button selection	
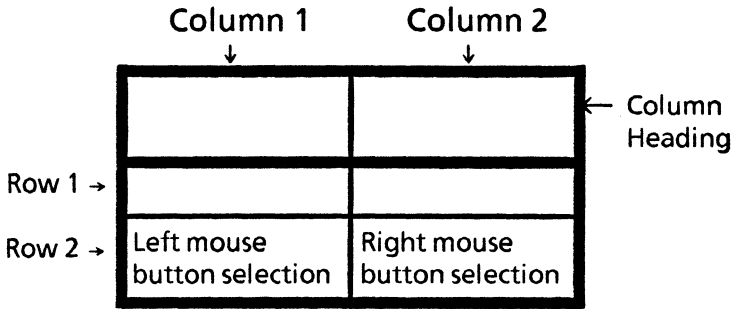
Figure 4-2 **Selecting a row**

2. **Document auxiliary menu method** - The document auxiliary menu contains the commands [SELECT TABLE COLUMN] and [SELECT TABLE ROW]. Select a field within the desired row or column. Position the pointer on the document auxiliary menu, hold down the left mouse button, and release the mouse button when the appropriate command is highlighted. Although these commands can be used at any time, they are primarily used to select a column in a single-row table or a row in a single-column table, or a divided column

The table in Figure 4-3 contains a divided column labeled Children.

Name	Address	Phone	Children	
			Name	Age

Figure 4-3 **Divided column**

The procedure for selecting a column that has been subdivided is slightly different than the procedure for an undivided column. Select either of the subcolumns (Name or Age) using the select-adjust method and then select the entire Children column by clicking once again with the left mouse button on the already highlighted subcolumn

NOTE: It is not possible to select column headings as a row unit, since each column heading is separate. Yet, when a column is selected, the column headings are included.

In the following exercise, you select and delete rows and columns in a table:

1. **Open** TA PR 4-1.

2. **Select** [EDIT].

Deleting the second row in the by-row table by selecting the row using the select-adjust method:

3. **Position** the caret in the first field of the second row. The field is highlighted.

4. **Click** the right mouse button in the second field of the second row. The entire row is highlighted.

5. **Press** <DELETE>. The second row has been deleted.

   NOTE: If there is text within the row, the following message appears in the message area:

   Are you sure you want to DELETE that object?
   [YES] [NO]

   When YES is selected, the row is deleted.

Deleting the Address column of the by-column table using the document auxiliary menu command:

6. **Position** the caret in a field of the Address column.

7. **Position** the pointer on the document auxiliary menu.

8. **Hold down** the left mouse button.

9. **Release** the mouse button when [SELECT TABLE COLUMN] is highlighted. The Address column is highlighted.

10. **Press** <DELETE>. The Address column has been deleted.

    NOTE: If there is text in the field area of the column, this deletion must be confirmed by selecting [YES] in the message area. Text in the heading only does not require a confirmation.

Selecting a subdivided column:

11. **Click** in the first field of the Name subcolumn.

12. **Click** the right mouse button in the third field of the Name subcolumn. The Name subcolumn is highlighted and selected.

13. **Click** the highlighted subcolumn once again with the left mouse button. The entire Children column is now highlighted.

14. **Do not delete** the Children column .

The tables in your document should look like these:

Item	Price

By-row table

Name	Phone	Children	
		Name	Age

By-column table

15. Select [CLOSE].

Selecting multiple rows or columns

Multiple rows or columns are also selected using the select-adjust method. Using this method you:

1. Select a row or column using the select-adjust method.

2. Position the pointer in another row or column and click with the right mouse button. All the rows or columns between the selected item and the pointer's location are selected.

   NOTE: After selecting multiple undivided columns and rows, you can move, copy, and delete them, as well as display their properties.

In the following exercise, you select single and multiple rows or columns.

1. **Open** TA PR 4-1.

2. **Select** [EDIT].

One way of deleting three rows of the by-column table:

3. **Select** the first field within the third row with the left mouse button.

4. **Select** the second field within the same row with the right mouse button. The row common to both fields is now selected and highlighted.

5. **Place** the pointer in the first field of the bottom row, and click with the right mouse button. All the rows between the selected row and the pointer's location are selected.

6. **Press** <DELETE>.

Deleting the Item column in the by-row table:

7. **Select** the first field within the first row. A blinking caret is placed in that field.

8. **Select** the column heading labeled Item, using the right mouse button.

9. **Release** the mouse button. The column that is common to both fields is now selected and highlighted.

10. **Press** <DELETE>.

The tables in your document should look like these:

Price

By-row table

Name	Phone	Children	
		Name	Age

By-column table

12. Select [CLOSE].

Selecting lines within a table

Like rows and columns, a single line or multiple lines within a table can be selected. Once they are selected, the properties of these lines can be changed.

NOTE: Lines cannot be moved, copied, or deleted. They can be made invisible.

To select any single line, you click the left mouse button anywhere on the line. The ends of the line become highlighted.

Multiple lines can be selected in two ways:

● **Multiple clicking method** - Multiple clicking the left mouse button on the selected line

● **Select-adjust method** - Extending the selection of the lines using the right mouse button

Columns in a table can be divided, creating a layered table, as shown in Figure 4-4. The divided column can be thought of as resting on top of the table. Thus, when you select multiple lines, only those lines at the same level are highlighted.

Name	Building			Shift	
	1	8	9	AM	PM

Figure 4-4 **Layered table**

In the following exercise, you select lines within a table and change their properties.

Selecting lines by multiple clicking :

1. **Open** TA PR 4-2.

2. **Select** [EDIT].

3. **Select** the line between the Name and Address columns with the left mouse button.

4. **Click** the left mouse button again on the already highlighted line. Notice that the main column division lines are highlighted.

5. **Select** a line within the divided column labeled Security Status. The previously selected lines are no longer highlighted.

6. **Click** the left mouse button again on the already highlighted line. The lines highlighted are only those within the subdivided column labeled Security Status.

7. **Select** the line within the divided column labeled Children with the left mouse button.

8. **Click** the left mouse button again on the highlighted line. Since this is the only line within the divided column, the selection does not extend to any other lines.

Selecting by the select-adjust method and changing the properties of lines:

9. **Select** the line between rows 1 and 2 using the left mouse button.

10. **Select** all row division lines with the right mouse button.

11. **Press** <PROP'S>. The table ruling line property sheet appears.
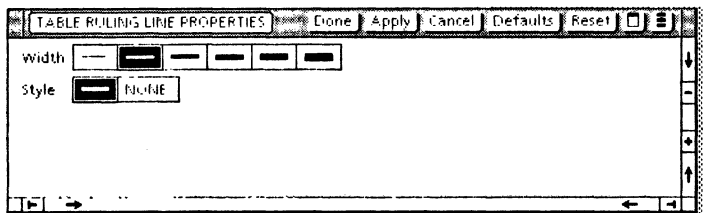
NOTE: This table ruling line property sheet allows you to determine whether or not you want lines to be visible. It also allows you to change their width.

Once ruling lines are selected, they can have their properties (width and style) changed through the use of the table ruling line property sheet. However, they cannot be moved, copied, or deleted.

12. **Select** [NONE] for the style of the ruling lines.

13. **Select** [DONE]. The selected lines are not visible on the screen. They will also not be visible on the printed copy.

NOTE: If [SHOW STRUCTURE] is selected in the document menu, lines with [NONE] selected will be visible on the screen. If [DON'T SHOW STRUCTURE] is selected, the lines will not be visible on the screen.

14. Select [SHOW STRUCTURE] in the document auxiliary menu. The selected lines are now visible on the screen. They will still not be visible on the printed copy.

15. Select [DON'T SHOW STRUCTURE] in the document auxiliary menu. The selected lines are not visible on the screen.

The table in your document should look like this:

Name	Address	Security Status			Children	
		1	2	3	Name	Age

16. Select [CLOSE].

Selecting a table

There are three ways to select a table. When a table is selected by any one of these methods, it can be deleted, copied, or moved. Only with the first two methods, however, can the table's properties be displayed.

1. **Selecting the frame method** - Position the pointer near one of the table's border lines and click the left mouse button.

   NOTE: When a table is first entered into a document, the frame of the table is the same size as the table itself. The frame, however, can be made larger using <STRETCH>. (Refer to the chapter titled "Basic Graphics"). This displays the table within a visible frame, forming a double border.

Figure 4-5 illustrates a stretched frame.
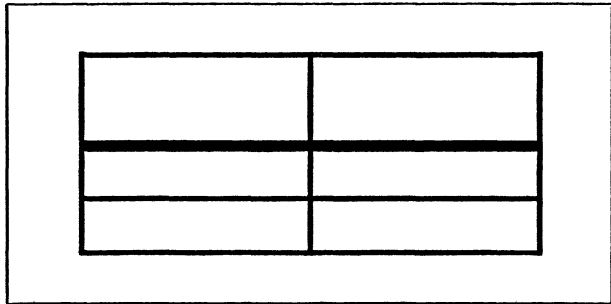
Figure 4-5 **Stretched frame**

2. **Multiple clicking method** - Select a row or column, and then click the left mouse button within the highlighted row or column until the entire table is highlighted.

3. **Selecting the anchor method** - Display the table anchor (select [SHOW STRUCTURE] in the document auxiliary menu) and then select the anchor.

   NOTE: If you select the table anchor, you cannot display the table's properties.

In the following exercise, you select a table using the select the frame, multiple clicking, and anchor methods. You then copy and move the table.

1. Open TA PR 4-1.

2. Select [EDIT].

Selecting the by-row table using the select the frame method:

3. Select the table frame with the left mouse button. The table is now selected and highlighted.

4. **Press <DELETE>.**

   NOTE: After you press <DELETE>, the following question appears in the message area at the top of the screen:

   Are you sure you want to DELETE the flashing object? [YES] [NO]

   This allows you to confirm or cancel the deletion.

5. Select [YES] in the message screen area. The by-row table is now deleted.

Selecting the by-column table using the multiple clicking and the anchor methods:

6. Select the first row using the select-adjust method.

7. Click the left mouse button in the highlighted row. The whole table is now selected and highlighted.

8. Select [SHOW STRUCTURE] in the document auxiliary menu.

9. Select the anchor of the by-column table with the left mouse button. The table is deselected and the anchor becomes highlighted.

10. Press <DELETE>, and then select [YES] in the message area. The by-column table is now deleted.

11. Select [CLOSE].

Copying a table:

12. **Open** TA PR 4-3.

13. Select [EDIT].

14. Select [SHOW STRUCTURE] in the document auxiliary menu.

15. Select the table.

16. Press < COPY >.

17. **Position** the pointer after the words: Place the duplicate copy here.

18. Click the left mouse button. A second anchor is placed after the words, but the new table is at the bottom of the document.

19. Select [PAGINATE] in the window header. After pagination is completed, the table will be in its proper place.

Moving a table:

20. Select the copied table.

21. Press < MOVE >. Again the pointer changes and the following message appears in the message area:

    Please indicate a destination with either button

22. **Position** the pointer after the words: Move the table to this new location.

23. Click the left mouse button.

24. Select [PAGINATE].

Your document should look like this:

Place the duplicate copy here:

Move the table to this new location:

25. Select [CLOSE].

Summary

In this section, you studied how to:

- Select and delete single and multiple rows and columns

- Select single and multiple lines

- Change properties of lines

- Use the selecting the frame, multiple clicking, and selecting the anchor methods to select an entire table

- Move and copy tables

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

The following pages contain an optional self check exercise.

Self check 4-1

You have practiced selecting rows, columns, lines, and tables. You know how to enter text into tables. Now you are ready to check your knowledge of these skills. Open self check document TA SC 4-1 and select [EDIT]. If you need assistance with any of the procedures, turn to the next page for detailed instructions.

1. Delete the Item column of the by-row table.

2 Delete two rows of the by-column table.

3. Delete the Children column of the by-column table.

4. Enter the following information:

Name	Address	Security Status
Alan G.	New York	3
Susan B.	Chicago	3
Tom H.	Dallas	2

NOTE: The Security Status columns already are labeled 1, 2, 3. Place an X in the appropriate Security Status column for each name, as shown below.

Security Status		
1	2	3
		x
	x	

5. Move the by-row table to the noted location.

Answers to self check 4-1

1. **To delete the Item column of the by-row table:**

   Select the Item column using the select-adjust method.

   Press <DELETE>.

2. **To delete two rows of the by-column table.**

   Select a row using the select-adjust method.

   Select the neighboring row with the right mouse button.

   Press <DELETE>.

3. **To delete the Children column of the by-column table:**

   Select the Age subcolumn using the select-adjust method.

   Multiple click the highlighted subcolumn with the left mouse button.

   Press <DELETE>.

   Select [YES] in the message area.

4. **To enter information into the table:**

   Type: Alan G.

   Press <NEXT>.

   Type: Susan B.

   Press <NEXT>.

   Type: Tom H.

   Press <NEXT>.

   Type: New York.

Press <NEXT>.

Type: Chicago.

Press <NEXT>.

Type: Dallas.

Press <NEXT> six times.

Type: X.

Press <NEXT>.

Type: X.

Press <NEXT>.

Type: X.

5. To move the by-row table:

Select the table.

Press <MOVE>.

Position the pointer and click the left mouse button at the end of the sentence: Move the by-row table to its new location.

Select [PAGINATE].

The tables in your document should look like these:

By-row table:

Price

By-row table

By-column table:

Move the by-row table to its new location:

Name	Address	Security Status		
		1	2	3
Alan G.	New York			x
Susan B.	Chicago			x
Tom H.	Dallas		x	

By-column table

Select [CLOSE].

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5. Adding rows and columns

Overview

Tables are used to display selected information in a simple, easy to read, and clear manner. In the previous section, you learned how to select rows, columns, and the table itself. This knowledge is a prerequisite to learning how to create more complex tables.

After completing this section, you should be able to add rows to a by-row and/or a by-column table by using <NEXT>, typing in text, or copying a row. You should also be able to add columns to a by-row and/or a by-column table by using <NEXT> or copying a column.

Adding rows to tables

There are four ways to add rows to a table. One of them can be used only on a by-row table. Three of them can be used on either a by-row or by-column table.

1. **<NEXT>** method - This method is used only on a by-row table. Position the caret in the last field of the last row and press <NEXT>. A new row is added to the bottom of the table, as shown in Figure 5-1.

	Place caret here, Press <NEXT>.
NEW	**ROW**

Figure 5-1 Adding rows to a table using <NEXT>

NOTE: A new row can be added to the bottom of a by-row table using the <NEXT> method only if the Number of Rows option in the table property sheet is set to [VARYING], as shown in Figure 5-2. If [FIXED] is selected, this method cannot be used.
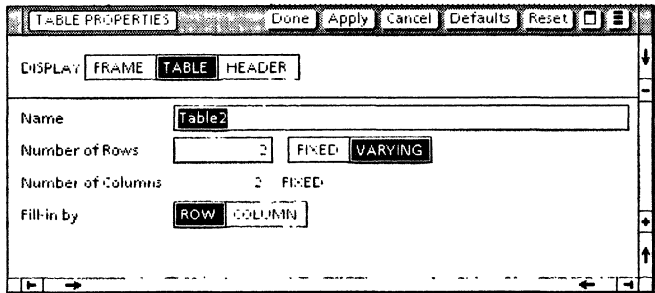
Figure 5-2 Table property sheet

2. **Typing in text method** - This method can be used on a by-row and a by-column table. Select the row containing the words: First Row (refer to Figure 5-3) using the select-adjust method, and then type in the words: New row. A new row is added under the previously highlighted row, and the text is entered into the first field of that new row.

Column 1   Column 2
    ↓   ↓

| Row 1 → | First row | | ← Column |
| Row 2 → | New row | | Heading |

Figure 5-3 **Typing in text method**

3. **Copying a row method** - This method can be used in a by-row and a by-column table. Select the row containing the words: Select here (refer to Figure 5-4) using the select-adjust method, and press <COPY>. Then position the pointer on the bottom line of the last row (or any other desired row) and click the left mouse button. A new row appears.

Column 1   Column 2
    ↓   ↓

Row 1 →	Select here		← Column
Row 2 →			Heading
	Select here		

Figure 5-4 **Copying a row method**

NOTE: You can move a row within a table or between tables by pressing <MOVE> instead of <COPY>. The row is moved to a preselected location. If the row is moved to another table, the row must have the same number of columns as those in the destination table. Properties of a row can be changed in the table row property sheet, as shown in Figure 5-5.
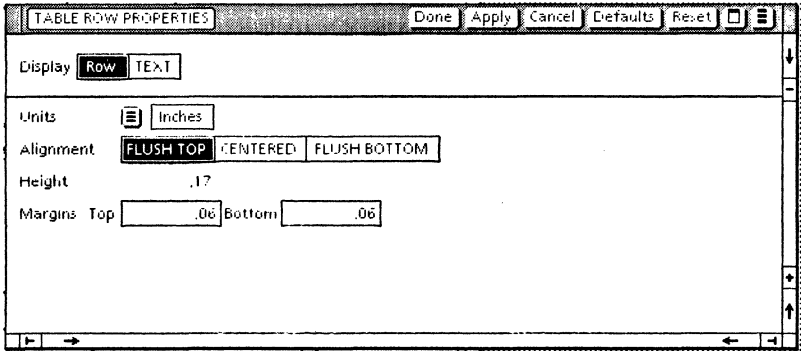
Figure 5-5 **Changing properties**

4. **Property sheet method** - This method can be used in a by-row and by-column table. Specify the number of rows on the table property sheet (refer to Figure 5-2) and select [DONE]. The specified rows appear in the table. If the option [FIXED] is selected, rows cannot be added to a by-row table using the <NEXT> method. If [VARYING] is selected, rows can be added to the table using any of the above methods.

In the following exercise, you use three of the four methods of adding rows to a table (you practice using the table property sheet method in Section 9).

1. **Open** TA PR 5-1.

2. **Select** [EDIT].

Using the <NEXT> method:

3. **Enter** a by-row table after the words: By-row table.

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <F>.

   Release <KEYBOARD>.

4. **Select** the table.

5. **Press** <PROP'S>. The frame property sheet appears immediately.

6. **Select** [TABLE] on the display line. The table property sheet appears immediately, with [VARYING] already selected .

   NOTE: [VARYING] must be selected in order to add rows to a by-row table using the <NEXT> method.

7. **Select** [DONE].

8. **Position** the caret in the last field of the table and **press** <NEXT>. A new row is added.

Using the typing in text method:

9. **Enter** a by-column table after the words: By-column table.

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <D>.

   Release <KEYBOARD>.

10. **Select** the first row using the select-adjust method. The row is highlighted.

11. **Type** the following in the highlighted row: New Row. As soon as the letter N is typed, a new row is entered under the originally highlighted row, with the first field containing the words: New Row.

Using the copying a row method:

12. **Select** the middle row in the by-column table (containing the words: New Row), using the select-adjust method.

13. **Press** <COPY>.

14. **Position** the pointer on the bottom line of the last row in the table, and **click** the left mouse button. The selected row is copied to the bottom of the table.

15. **Select** [PAGINATE].

The tables in your document should look like these:

By-row table:

By-column table:

New Row	
New Row	

16. Select [CLOSE].

Adding columns to a table

There are two ways to add columns to a table. One method can be used only on a by-column table. The other can be used on either a by-row or a by-column table.

1. <NEXT> method - This method is used only on a by-column table. Position the caret in the last field of the last column and press <NEXT>. A new column (column 3) is added to the right end of the table, as shown in Figure 5-6.

Column 1	Column 2	Column 3
Row 1 →		New
Row 2 →	Place caret: press <NEXT>	Column

Figure 5-6 Adding columns to tables using <NEXT>

NOTE: A new column can be added to the right end of a by-column table only if the Number of Columns option in the table property sheet is set to [VARYING].

2. **Copying a column method** - This method can be used in a by-column and a by-row table. Select column 2 (refer to Figure 5-7) and press <COPY>. Then position the pointer on the right line of the last column and click the left mouse button. The new column appears to the right of the last column, as shown in Figure 5-7.

Column 1	Column 2	Column 3
	Copy This	New
	Column	Column

Row 1 → (Copy This / Column)
Row 2 → (New / Column)

Figure 5-7 **Copying a column**

The new column could follow a column other than the last column by selecting the right line of the desired column.

NOTE: You can move a column within a table or between tables by pressing <MOVE> instead of <COPY>. The procedure is the same as when you copy a column. The column selected is moved to a preselected location. If the column is moved to another table, the column must have the same number of rows as those of the destination table. Properties can be changed in the table column property sheet. Due to the many options within this property sheet, changing of properties is discussed in a later section.

In the following exercise, you use the two methods of adding columns to a table.

1. **Open** TA PR 5-1.

2. **Select** [EDIT].

Using the <NEXT> method:

3. **Position** the caret in the last field of the last column in the by-column table.

4. **Press** <NEXT>. A new column is added to the table.

Using the copying a column method:

5. **Select** the last column of the by-row table.

6. **Press** <COPY>.

7. **Position** the pointer on the right line of the last column.

8. **Click** the left mouse button. The selected column is copied to the right side of the table.

The tables in your document should look like this:

By-row table:

By-column table

New Row		
New Row		

9. Select [CLOSE].

Summary

In this section, you studied how to:

- Use <NEXT> to add rows to a by-row table and columns to a by-column table

- Use the typing in text method to add a row to a by-row or by-column table

- Use the copying a row method to add a row to a by-row or by-column table

- Use <NEXT> to add columns to a by-row or by-column table

- Use the copying a column method to add a column to a by-row or by-column table

- Change the properties of a row

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

The following pages contain an optional self check exercise.

Self check 5-1

You have practiced adding rows and columns to tables. Now you are ready to check your knowledge of these skills. Open self check document TA SC 5-1 and select [EDIT]. If you need assistance with any of the procedures, turn to the next page for detailed instructions.

1. Enter a by-column table.

2. Add a third column.

3. Add a row to the bottom of the table.

Answers to self check 5-1

1. To enter a by-column table:

   Select [EDIT].

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <D>.

   Release <KEYBOARD>.

2. To add a third column:

   Position the caret in the last field of the last column.

   Press <NEXT>.

3. To add a row to the bottom of the table:

   Select the bottom row using the select-adjust method.

   Press <COPY>

   Position the pointer on the bottom line of the last row.

   Click the left mouse button.

   The table in your document should look like this:

6.   Subdividing columns

Overview

In the previous section, you learned how to add rows or columns; however, typing numerical or statistical data into a table may require subdivided columns. Subdivided columns allow you to enter two or more additional headings and columns of data below the initial column heading.

When you are subdividing a column, it also may be necessary to change the width of the column in order to display the data in a uniform manner.

After completing this section, you should be able to subdivide columns using the document menu or the table column property sheet, and adjust the width of columns and subcolumns.

Subdividing columns

There are two ways to subdivide columns:

1. **Document auxiliary menu method** - This method consists of a two-step procedure. Select the column you want to divide using the select-adjust method. Then position the pointer on the document auxiliary menu, hold down the left mouse button, select [SUBDIVIDE], and release the left mouse button. The column is immediately divided into two subcolumns.

2. Table column property sheet method - This consists of a multi-step procedure. Select the column to be divided and press <PROP'S>. The table column property sheet (a portion of it is shown in Figure 6-1) is displayed.
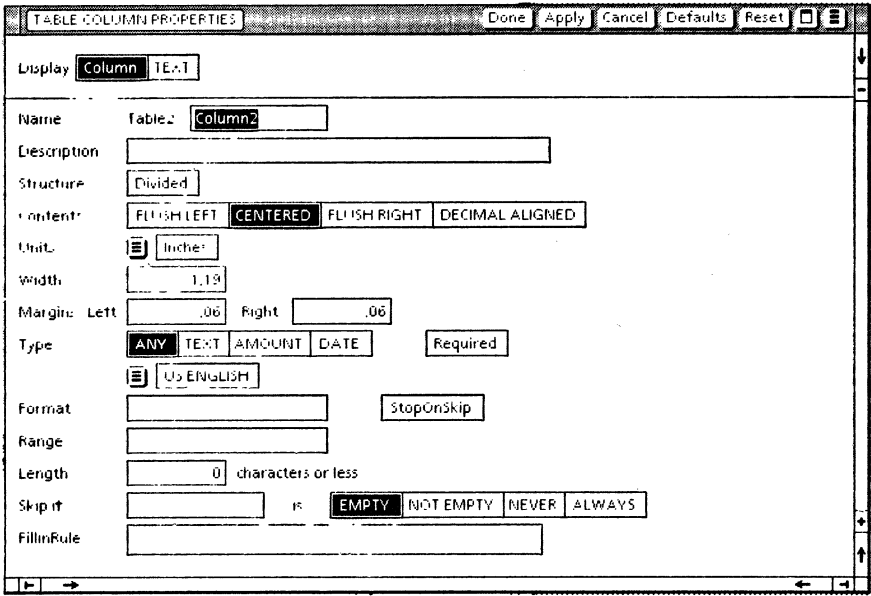
Figure 6-1 Table column property sheet

Select [DIVIDED] on the property sheet. The Subcolumns option is displayed, as shown in Figure 6-2.
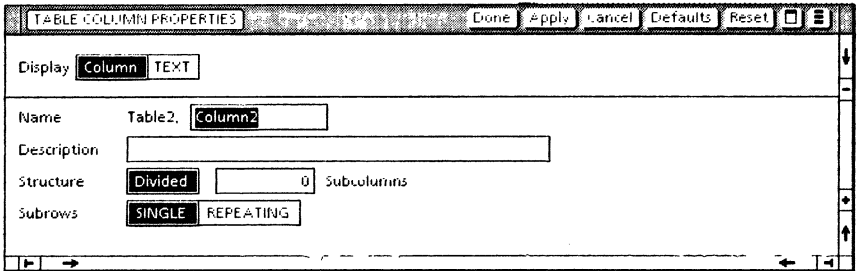
Figure 6-2 Subcolumns option

This option allows you to specify the number of subcolumns desired. Enter this number and select [APPLY] or [DONE]. The selected column is then divided into that number of subcolumns.

The Subrows option allows you to decide whether the divided column should contain repeating subrows or a single one. For more details, refer to the sub-tab titled "Tables" in the VP Series reference library.

In the following exercise, you subdivide a column within a table.

1. **Open** TA PR 6-1.

2. **Select** [EDIT].

3. **Position** the caret in the last field of the column labeled Salary.

4. **Press** <NEXT>. A new column is added to the right of the column labeled Salary.

   NOTE: This method can only be used on a by-column table.

5. **Select** the new column using the select-adjust method.

6. **Position** the pointer on the document menu.

7. **Hold down** the left mouse button. When the menu appears, position the pointer on [SUBDIVIDE] and release the mouse button. The new column is subdivided into two columns, each with its own column heading.

8. **Type** the following in the initial column heading of the new column: Salary Range.

9. **Press** <NEXT>.

10. **Type** the following in the first subdivided column heading: Low; **press** <NEXT>; **type** the following in the second subdivided column heading: High.

11. **Position** the pointer in the first field of the subcolumn Low.

12. **Type** the following numerical data into the Low and High subcolumns, using <NEXT> to move down the columns:

Low	High
20,000	30,000
30,000	40,000
40,000	50,000

NOTE: As you type, the last digit of each number wraps to a second line. In the next section, you learn how to select-adjust column width to accommodate the width of these entries.

The table in your document should look like this (the size has been reduced slightly):

Name	Address	Phone #	Salary	Salary Range	
				Low	High
J Reed	7213 N. St	213-5671	25,000	20,00 0	30,00 0
C Holley	4671 Elm	345-9820	35,500	30,00 0	40,00 0
C C Rider	3211 Hill	651-4580	40,000	40,00 0	50,00 0

By-column table

13. **Select [CLOSE].**

Select-adjusting the width of columns and subcolumns

When columns are subdivided, the system inserts the number of specified columns within the width of the original column and divides the width of the subcolumns accordingly. For example, if the width of the original column is 1 inch and the column is divided into two subcolumns, the width of each subcolumn is 1/2 inch. This is illustrated in Figure 6-3.

Figure 6-3 Subcolumn width

Changing the width of a column before you subdivide generally is quicker and easier than changing the width of each subcolumn individually. However, the procedure for changing the width of the initial column or the subcolumns is the same.

The width of multiple undivided columns can be changed at one time by selecting all the columns to be changed and pressing <PROP'S>. This reveals the table column property sheet, on which the width of columns, as well as other properties, can be changed.

Open TA PR 6-1 and select [EDIT]. The last digit of each number entered into the High and Low salary subcolumn was placed on the next line. The reason for this is that the subcolumn is too narrow to accommodate the entire number on the same line.

In the following exercise, you change the width of these subcolumns. This will place the entire number on the same line. Additionally, you change the width of two columns in the table.

Adjusting subcolumn widths:

1. Select the Low subcolumn using the select-adjust method.

2. **Press** <PROP'S>. The table column property sheet appears.

3. **Delete** the number in the Width option. The number is represented in inches.

4. **Enter** 1 for the width (representing 1 inch).

5. Select [DONE] on the property sheet.

   NOTE: The subcolumn width has expanded to 1 inch, allowing the numbers to appear on one line.

6. **Select** the High subcolumn using the select-adjust method.

7. **Change** the width of this subcolumn to 1 inch. (Refer to steps 3 through 6.)

   NOTE: By selecting both subcolumns at one time, the width of both can be expanded at the same time.

Adjusting the width of multiple columns:

8. **Select** the Phone column using the select-adjust method.

9. **Select** the Salary column with the right mouse button. Both columns are highlighted.

10. **Change** the width of these columns to 1 inch.

11. Select [DONE].

The table in your document should look like this (the size has been reduced slightly):

Name	Address	Phone #	Salary	Salary Range	
				Low	HIgh
J Reed	7213 N. St	213-5671	25,000	20,000	30,000
C Holley	4671 Elm	345-9820	35,500	30,000	40,000
C C Rider	3211 Hill	651-4580	40,000	40,000	50,000

By-column table

12. Select [CLOSE].

Summary

In this section, you studied how to:

- Use the document auxiliary menu to subdivide single and multiple columns

- Use the table column property sheet to subdivide single and multiple columns

- Select-adjust widths of single and multiple columns

If you need more practice, complete the exercises again. To do this, use a new copy of the practice documents for this section.

The following pages contain an optional self check exercise.

Self check 6-1

You have practiced subdividing columns and changing the width of both columns and subcolumns. Now you are ready to check your knowledge of these skills. Open self check document TA SC 6-1 (it is a blank document) and select [EDIT]. If you need assistance with any of the procedures, turn to the next page for detailed instructions.

1. Enter a by-column table.

2. Add two rows to the table.

3. Add three columns to the table.

4. Change the width of the last two columns to 1.5 inches each.

5. Subdivide the last two columns.

6. Enter the following information into the first three column headings:

   Name

   Badge#

   Dept.

7. Enter the following information into the last two columns and their subcolumns:

   Arrival, In, Out

   Departure, In, Out

Answers to self check 6-1

1. **To enter a by-column table:**

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <D>.

   Release <KEYBOARD>.

2. **To add two rows to the table:**

   Select the first row using the select-adjust method.

   Select the second row with the right mouse button.

   Press <COPY>.

   Position the pointer on the bottom line of the last row.

   Click the left mouse button.

3. **To add three columns to the table:**

   Position the pointer in the last field of the last column.

   Press <NEXT>.

   Repeat this procedure twice.

4. **To change the width of each of the last two columns to 1.5 inches:**

   Select the fourth column using the select-adjust method.

   Select the fifth column with the right mouse button.

   Press <PROP'S>.and delete the number in the Width option.

Enter 1.5 for the Width option.

Select [DONE].

5. **To subdivide the last two columns:**

Select the fourth column using the select-adjust method.

Select the fifth column with the right mouse button.

Hold down the left mouse button on the document auxiliary menu.

When the option menu appears, position the pointer on [SUBDIVIDE] and release the mouse button.

6. **To enter information into the column headings:**

Position the caret in the first column heading.

Type: Name.

Press <NEXT>.

Type: Badge#.

Press <NEXT>.

Type: Dept.

7. **To enter information into the last two column and subcolumn headings:**

Press <NEXT> after each entry, type:

Arrival

In

Out

Departure

In

Out

The table in your document should look like this (the size has been reduced slightly):

Name	Badge#	Dept.	Arrival		Departure	
			In	Out	In	Out

(This page intentionally blank)

7.   Creating subrows

Overview

In the previous section, you learned how to divide columns into subcolumns through the use of the document auxiliary menu and the table column property sheet. You also learned how to adjust the width of these columns to accommodate data entered.

You may find it necessary to add subrows to the rows within the table so more information can be displayed. Figure 7-1 illustrates a table containing a single undivided column and a column containing subcolumns and subrows.

Original Column Heading1	Original Column Heading2	
	Subcolumn Heading1	Subcolumn Heading2
Row 1	Subrow1 - Row 1	
	Subrow2 - Row1	
Row 2	Subrow2 - Row 2	
	Subrow2 - Row 2	

Figure 7-1 Subcolumns and subrows

After completing this section, you should be able to divide columns using the table column property sheet, and add subrows to the rows of a by-column and by-row table by using <NEXT> or typing in text.

Dividing columns

Before you can actually create subrows within a column(s) of a table, the column(s) must be divided, using the **table column property sheet method**

NOTE: A column may also be divided by selecting the column to be divided using the select-adjust method, and selecting [SUBDIVIDE] in the document auxiliary menu.

To display the property sheet, select the column whose rows you want to subdivide and press <PROP'S> (Figure 7-2).
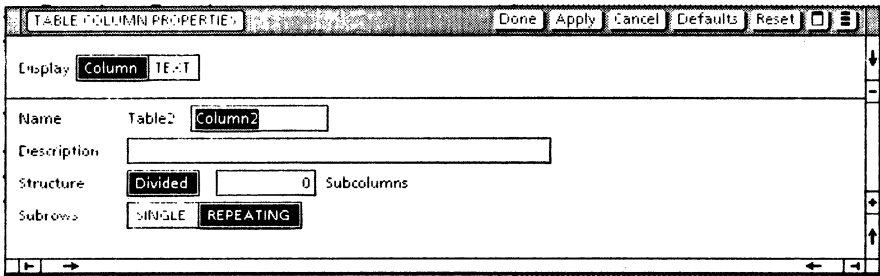
Figure 7-2 **Subdividing rows within a column**

By selecting the structure option [DIVIDED], the subrow options [SINGLE] and [REPEATING] are displayed. To create subrows, [REPEATING] must be selected.

Once the property sheet is closed, a subcolumn heading automatically appears beneath the original column heading, as shown in Figure 7-1.

NOTE: Only rows within a divided column may contain subrows. [REPEATING] must be selected.

The default setting for subcolumns is 0. However, at least one subcolumn is needed to subdivide a column. If the default setting is not changed, the following error message appears:

Divided columns must have at least one subcolumn.

Creating subrows

After the column has been divided, there are three ways to create subrows. The method used depends on whether the table is by-row or by-column.

NOTE: These methods can only be carried out after the column has been divided.

1. **<NEXT> method** - This method can be used only on a by-row table. Place the caret in a row of the last subcolumn of a divided column. Press <NEXT>. A subrow appears, and the caret is positioned in the subrow within the first subcolumn.

   NOTE: If you continue to press <NEXT>, an additional subrow will be created each time you exit from the last subcolumn. When you wish to move to the next column in the main row, rather than create an additional subrow, press <SKIP> (shift + <NEXT>).

Divided column	
Subcolumn 1	**Subcolumn 2**
Row 1	**Row 1** **Press <NEXT>**
Row 1 Subrow	
Row 2	**Row 2**

Figure 7-3 Subrows using <NEXT>

   If the caret is placed in the first field of the first subcolumn and <NEXT> is pressed, the caret moves to the next subcolumn.

   NOTE: A by-column table can be changed to a by-row table, which allows you to use the <NEXT> method of adding subrows. This change is made on the table property sheet, as shown in Figure 7-4.
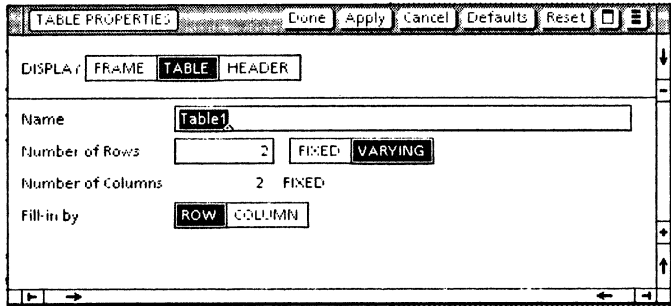
Figure 7-4 Changing the filled in by option

Once [ROW] is selected, the table becomes a by-row table, and the <NEXT> method of adding subrows can be utilized.

2. **Typing in text method** - This method can be used with a by-row or a by-column table, but only when the column is divided and contains two or more subcolumns.

   Select the row common to both subcolumns, using the select-adjust method. The row becomes highlighted. Then type text into the highlighted row. It is entered into the first field of a new subrow located directly beneath the originally highlighted row. Figure 7-5 illustrates this method.

		Row	*Selected*
		New	Subrow
		Row	*Selected*
		New	Subrow

Figure 7-5 Typing in text method

This method can be continued until the desired number of subrows is created. The placement of subrows depends on which common row is originally selected.

In the following exercise, you add subrows to a divided column.

Changing a by-column table to a by-row table:

1. **Open** TA PR 7-1.

2. **Select** [EDIT].

3. **Select** the table.

4. **Press** <PROP'S> and select [TABLE] in the display row, if it is not already selected.

5. **Select** [ROW], which is one of the Fill in by options. The table is now a by-row rather than a by-column table.

6. **Select** [DONE].

Dividing a column:

7. **Select** the Address column using the select-adjust method.

8. **Press** <PROP'S>. The table column property sheet appears.

9. **Select** [DIVIDED].

   NOTE: Notice the 0 in the box before the Subcolumns option. This indicates that there are no subcolumns in the selected column. To subdivide the column into one or more subcolumns, indicate the number of subcolumns in the box provided.

10. **Delete** 0 in the Subcolumns option.

11. **Type:** 1.

12. **Select** [REPEATING]. This indicates that you want to add subrows to that column.

13. **Select** [DONE].

Adding subrows using the **<NEXT>** method:

14. **Position** the caret in the first row of the Address column (7213 N St) with the left mouse button.

15. **Press** <NEXT>. A new subrow appears under the selected row.

16. **Type** the following in the new subrow: Houston, TX.

17. **Select** the second row of the Address column (4671 Elm) with the left mouse button and **press** <NEXT>.

18. **Type:** Dallas, TX.

19. **Select** the third row of the Address column (3211 Hill) with the left mouse button and **press** <NEXT>.

20. **Type:** Denver, CO.

NOTE: In a by-row table, you can add as many subrows as you like by pressing <NEXT>, as shown in Figure 7-6.

Name	Phone #	Salary	Salary Range	
			Low	High
J Reed	213-5671	25,000	20,000	30,000
			22,500	34,000
C Holley	345-9820	35,500	30,000	40,000
			32,500	46,000
C C Rider	651-4580	40,000	40,000	50,000
			43,000	52,000

Figure 7-6 Adding subrows with <NEXT>

Adding subrows using the typing in text method:

21. Select the Salary Range column and press <PROP'S>.

22. Select [REPEATING].

NOTE: [DIVIDED] should already be selected, since this column has two subcolumns.

23. Select [DONE].

24. Select the first row of the Salary Range column using the select-adjust method.

25. Type: 21,500. It appears in the first field of the new subrow.

26. Press <NEXT>and type: 31,500.

The table in your document should look like this (the size has been reduced slightly):

Name	Address		Phone #	Salary	Salary Range	
					Low	High
J Reed	7213 N. St		213-5671	25,000	20,000	30,000
	Houston, TX				21,500	31,500
C Holley	4671 Elm		345-9820	35,500	30,000	40,000
	Dallas, TX					
C C Rider	3211 Hill		651-4580	40,000	40,000	50,000
	Denver, CO					

27. Select [CLOSE].

Summary

In this section, you studied how to:

- Use the table property sheet to divide columns

- Change a by-column table into a by-row table

- Use <NEXT> to add subrows to a divided column

- Use <SKIP> to exist from a divided column

- Use the typing in text method to add subrows to a divided column

If you need more practice, complete the exercise again. To do this, use a new copy of the practice document for this section.

The following pages contain an optional self check exercise.

Self check 7-1

You have practiced adding subrows to a divided column. Now you are ready to check your knowledge of these skills. Open self check document TA SC 7-1 and select [EDIT]. If you need assistance with any of the procedures, turn to the next page for detailed instructions.

1. Enter a by-column table.

2. Subdivide the second column into two subcolumns with repeating rows and change the table to a by-row table.

3. Add the following information to the column headings:

   Item

   Description

   Color

   Stock#.

4. Add the following information:

   Item: Tent
   Color: Red, Green, Tan
   Stock#: 239, 240, 241

   Item: Backpack
   Color: Beige, Blue, Red, Gold
   Stock#: 183, 184, 185, 186

Answers to self check 7-1

1. **To enter a by-column table:**

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <D>.

   Release <KEYBOARD>.

2. **To subdivide the second column and change to a by-row table:**

   Select the second column using the select-adjust method.

   Press <PROP'S>.

   Select [DIVIDED].

   Delete the 0 in the Subcolumns option.

   Type 2 in the Subcolumns option.

   Select [REPEATING].

   Select [ROW].

   Select [DONE].

3. **To add column heading information:**

   Position the caret in the first column heading and type: Item.

   Pressing <NEXT> after each entry, type the following in the last three column headings:

   Description

   Color

   Stock #

5. **To** add the following textual information:

Press <NEXT> and type: Tent.

Pressing<NEXT> after each entry, type the following:

Red

239

Green

240

Tan

241

Select the second row in the Item column.

Type: Backpack.

Pressing <NEXT> after each entry, type the following:

Beige

183

Blue

184

Red

185

Gold

186

The table in your document should look like this:

Item	Description	
	Color	Stock #
Tent	Red	239
	Green	240
	Tan	241
Backpack	Beige	183
	Blue	184
	Red	185
	Gold	186

Select [CLOSE].

8. Setting fill-in order for fields and tables

Overview

In the previous sections, you learned to enter tables into a document and expand them by adding rows, columns, subrows, and subcolumns. You also learned to enter text into tables and their column headings by using <NEXT>.

Occasionally, within one document, you may include several tables as well as fields of information. These fields and tables are filled in by selecting them one at a time and entering text.

There is a way to simplify this fill-in order by using [SET FILL-IN ORDER] in the document menu. Setting the fill-in order is important, because it allows you to press <NEXT> through the tables and fields in a document and fill in text, according to a set pattern.

After completing this section, you should be able to set and verify the fill-in order of text within fields and/or tables.

It is recommended that, prior to working with this section, you learn how to create fields and set fill-in rules. This can be done by reviewing the "Fields" and "Fill-in Rules" chapters.

Setting and verifying the fill-in order

TA PR 8-1 demonstrates the possible uses of fields and tables in a very simple manner. Text can be entered into the field bounding characters (Г⅃), which represent fields, as well as the fields within the tables themselves. At this point, each field bounding character and each table is selected individually, so text can be entered in any sequential order.

Once you select [SET FILL-IN ORDER], found in the document auxiliary menu, you can determine or change the fill-in order of fields and/or tables. The fill-in order is set by the order in which the fields and tables are selected. For example, when setting the order, if the Employment History table is selected first and the Name field is selected second, subsequent use of <NEXT> will move the caret from the Employment History table to the Name field.

Once the fill-in order is completed, you select [END FILL-IN MODE], which is also located in the document auxiliary menu.

In the following exercise, you set the fill-in order of a document and then verify it.

Setting the fill-in order:

1. **Open** TA PR 8-1.

2. **Select** [EDIT]

3. **Position** the pointer on the document auxiliary menu.

4. **Hold down** the left mouse button; when the menu appears, **select** [SET FILL-IN ORDER] and **release** the left mouse button.

5. **Select** the left field boundary of the Name field with the left mouse button. This will be the first field to be filled in.

6. **Select** the left field boundary of the following fields in this sequential order:

   Name

   Social Security

   Present Address

   Home Phone

   Type of Work Preferred

   Geographic Preference

7. **Select** the following tables by clicking anywhere within each table border:

   Employment History Table

   Educational History Table

8. **Scroll** the screen up to reveal the Date field.

9. **Select** the left field boundary of the Date field.

10. **Select** [END FILL-IN MODE] in the document auxiliary menu by releasing the left mouse button.

    NOTE: The following message appears in the message area:

    7 out of 7 fields and 2 out of 2 tables have been added to the fill-in order.

    This indicates that all fields and tables within this document have been selected.

11. **Press < NEXT >.**

    NOTE: The following message appears in the message area:

    There are no more fields or tables.

    The message is received because the caret is in the last field of the fill-in order.

Verifying the fill-in order:

12. **Select** [GO TO FIRST FILL-IN ORDER] in the document auxiliary menu. This returns the caret to the first field or table in the fill-in order.

13. **Press** <NEXT>. The caret is placed in the second field of the fill-in order.

   NOTE: If you continue pressing <NEXT>, notice how the caret moves from field to field in the order of selection.

14. **Select** [CLOSE].

   NOTE: Fields and tables that cannot be accessed by pressing <NEXT> were not included in the original fill-in order. To enter text into these fields, they must be selected with the left mouse button.

   If you want to add previously non-selected fields to the fill-in order, select [APPEND TO FILL-IN ORDER], found in the document menu, and proceed through the selection process for the additional fields. If you want to change the fill-in order, [SET FILL-IN ORDER] must be selected.

Summary

In this section, you studied how to:

● Use [SET FILL-IN ORDER] to set the fill-in order for fields and tables

● Use [GO TO FIRST FILL-IN ORDER] to verify the fill-in order for fields and tables.

If you need more practice, complete the exercise again. To do this, use a new copy of the practice document for this section.

The following pages contain an optional self check exercise.

Self check 8-1

You have practiced setting the fill-in order for fields and tables. Now you are going to check your knowledge of this skill. Open TA SC 8-1 and select [EDIT]. If you need assistance with the procedures, turn to the next page for detailed instructions.

1. Set the fill-in order of the fields and tables in the sequence found on the practice document.

2. Verify that all fields and tables have been included in the fill-in order.

Answers to self check 8-1

1. **To set the fill-in order:**

   Position the pointer on the document auxiliary menu.

   Hold down the left mouse button.

   When the menu appears, select [SET FILL-IN ORDER].

   Select the left field boundary of each field and the table within the document, in the order in which they appear.

   Position the pointer on the document auxiliary menu.

   Hold down the left mouse button.

   When the menu appears, select [END FILL-IN MODE].

2. **To verify the fill-in order:**

   Select [GO TO FIRST FILL-IN ORDER] in the document auxiliary menu.

   Press <NEXT> to verify that all fields and tables have been included in the fill-in order.

9.   Table property sheet

Overview

In the previous sections, you practiced designing tables of varying complexities. Creating these specialized tables often is simplified by using the different property sheets associated with tables.

You have already used the table ruling line property sheet to make the lines of a table invisible and the table column property sheet to change the width of columns and divide them.
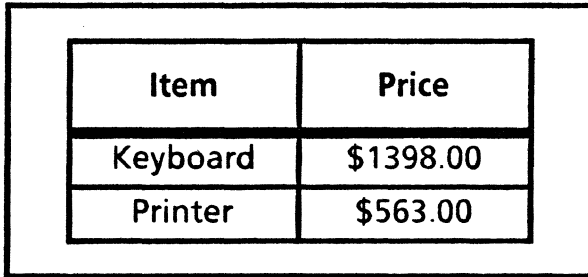
The table property sheet, which consists of table, frame, and header property sheets, was introduced to you when you changed a by-column table to a by-row table. The other options are considered in this section.

After completing this section, you should be able to use the table property sheet to add rows and switch from a by-row to a by-column table, use the frame property sheet to set border and caption properties, use the header property sheet to change column headings.

Frame property sheet

Every table is enclosed within a frame. Usually the frame is the same size as the table border and is hidden from view.

If you want your table to have a double border, as shown in Figure 9-1, you need to stretch the frame and select its properties.
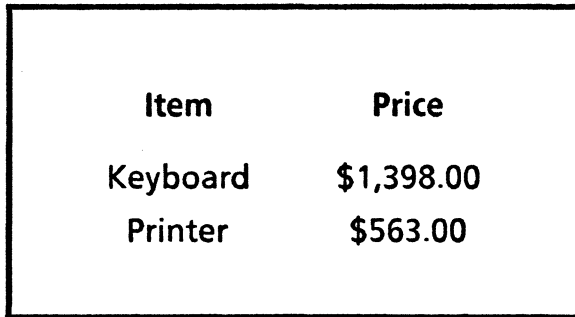
Item	Price
Keyboard	$1398.00
Printer	$563.00

Figure 9-1 Stretched border

If you want to change the properties of the table border, you have to stretch the frame, so the border can be selected.

Figure 9-2 shows how information can be displayed in columnar form within a frame, without the table border and ruling lines.

Item	Price
Keyboard	$1,398.00
Printer	$563.00

Figure 9-2 Table border and lines set to
[NONE]

Frame properties are changed using the frame properties sheet. The frame property sheet is enclosed within the table property sheet and is the first displayed when a table is selected and <PROPS> pressed (refer to Figure 9-3).

Figure 9-3 **Frame property sheet**
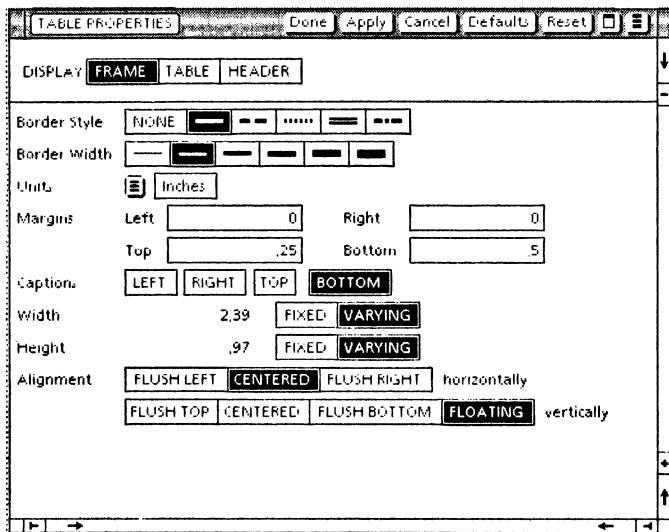
For more detailed information on this property sheet, refer to the sub-tab titled "Tables" in the VP Series reference library.

In the following exercise, you use the frame property sheet to set border and caption properties.

1. **Open** TA PR 9-1.

2. **Select** [EDIT].

3. **Select** the table.

4. **Press** <PROP'S>. The frame property sheet within the table property sheet appears.

NOTE: The width and height of the table frame can be set when [FIXED] is selected. With this option, if the frame is set at the same size as table, columns or rows cannot be added. The frame can, however, be set larger than the table and the table can expand within it. This allows you to set a specific amount of space for a table within your document.

If [VARYING] is selected for the width and height of the frame, the width and height of the table frame adjusts to the size of the table. As the table grows in size, the frame grows in size. You add rows and columns only when [VARYING] is selected.

5. Select [DONE].

6. Select the table on the bottom right corner using the select frame method.

   When a graphic frame is selected, the top row of function keys on the keyboard are redefined and the new temporary meanings of these keys are displayed on the screen.

7. Press the function key corresponding to <STRETCH>.

   NOTE: On the bottom righthand corner of the table border, where you selected the table, there is a small square. That is called the guiding point.

8. Hold down the left mouse button.

9. Move the pointer to the right and down, stretching the frame.

10. Release the left mouse button when the frame is bigger than the table by approximately 0.25 inch.

    Now the table border can be selected, and its properties can be changed using the table ruling lines property sheet.

11. **Select** the frame. The frame and the table are highlighted.

12. **Press** <PROP'S>. Next to the Border Style option on the frame property sheet are a number of selections. They change the appearance of the table frame. If [NONE] is selected, the table frame is not visible.

13. **Select** a dotted line option.

14. **Select** [APPLY]. The frame now is a dotted line.

15. **Select** the thickest width next to the Border Width option.

16. **Select** [APPLY].

    The Margins option can be used to position the frame in relation to the page margins. Its major function, however, is to reserve space for captions at the top, bottom, left or right sides of the table frame. Each margin can be reset. When a table is first entered from the keyboard, the left and right margins are set at 0, the top margin is set at 0.25 inch, and the bottom margin is set at 0.5 inch.

    When the margins are being set, occasionally the following message appears in the message area:

    Specified margins are too large to fit in the available space.

    When this occurs, the size of the specific margin must be reduced.

17. **Set** the following margins, using <NEXT>:

    Left - 0.5 inch

    Right - 0.5 inch

    Top - 0.5 inch

    Bottom - 0.5 inch

18. **Select** [APPLY]. Depending upon how big you made your frame, you may get a message indicating that the margins are too large. If this is the case, determine an acceptable size by

subtracting the frame width (or height) from the space available between page margins. The smallest number you can use is 0.

Captions are similar to page headings and footings. The size of the caption area is determined by the margins. When a table is first entered, it has a setting for a bottom caption only. Notice that [BOTTOM] is highlighted in the Caption option.

The Alignment option allows you to specify where you want the table positioned horizontally or vertically. When a new table is entered, it is centered horizontally and floats vertically.

When [FLUSH TOP] or [FLUSH BOTTOM] is selected, the Span option is added. This determines whether the frame should span the page or the column horizontally.

19. Select [TOP] in the Caption option. It becomes highlighted. Your table will now have a top and bottom caption of 0.5 inch (top and bottom margin settings).

20. Select [DONE].

21. Position the caret in the top caption area and type: Personnel Table.

22. Position the caret in the bottom caption area and type: 1985.

The table in your document should look similar to this one, although the border may look different, depending upon which border style you selected:

Personnel Table

Name	Address	Phone #	Salary
J Reed	713 N.St.	213-5671	25,000
C Holley	4671 Elm	345-9820	35,500
C C Rider	3211 Hill	651-4580	40,000

1985

23. Select [CLOSE].

NOTE: If you have stretched a table frame and want to return it to a glove-tight fit around the table, set the Height and/or Width options to [VARYING] on the frame property sheet and select [APPLY].

Table property sheet

To display the table property sheet (Figure 9-4), select
the table whose properties you want to change and
press <PROP'S>.

Figure 9-4 Table property sheet: by-row

By selecting [TABLE] on the display line, the property
sheet dealing with table properties is displayed.
Figure 9-4 has [TABLE] selected. Figure 9-4 displays
properties for a by-row table, since [ROW] has been
selected. A by-row selection allows you to set the
number of rows to varying or fixed, with the columns
remaining fixed.

Figure 9-5 displays properties for a_by-column table,
since [COLUMN] has been selected. A by-column
property sheet allows you to set the number of
columns to varying or fixed, with the number of rows
remaining fixed.

Figure 9-5 Table property sheet: by-column

In the following exercise, you use the table property sheet to add rows and to switch to a by-column table.

Adding rows:

1. **Open TA PR 9-2.**

2. **Select [EDIT].**

3. **Select** the by-row table and **press** <PROP'S>.

4. **Select [TABLE] in the display row.**

   NOTE: The property sheet reveals that this is a by-row table, containing four fixed columns and five rows.

   Next to the Name option, the following highlighted title appears: Table 1. Every table in your document must be named. If you do not assign it a specific name, the system automatically gives it a numeric name.

5. **Delete Table 1.**

6. **Type:** Personnel. Your table is now named Personnel.

   NOTE: The 5 after Number of Rows indicates that the table contains five rows. The 4 after Number of Columns indicates that the table contains four columns.

7. **Delete 5 and type 7.**

8. **Select [DONE].**

   Your table now contains seven rather than five rows. By typing in a number, you can add or delete rows.

   NOTE: The rows being deleted must be empty. If they contain information, you must confirm the deletion in the message area.

9. **Position** the caret in the last field of the last column and **press** <NEXT>. Notice a new row is not added by this method.

NOTE: The following message appears in the message area:

There are no more fields or tables.

Because [FIXED] is selected in the Number of Rows option, you cannot add any more rows using the <NEXT> method. You can, however, add rows by typing in the number of rows on the property sheet or by copying rows.

10. Select the table and press <PROP'S>.

11. Select [TABLE] in the display row.

12. Select [VARYING] for the Number of Rows option. This allows you to add additional rows to the table by using <NEXT>.

13. Select [DONE].

14. Position the caret in the last field of the last column and press <NEXT>. A new row is added.

Switching to a by-column table:

15. Select the table and press <PROP'S>.

16. Select [TABLE] in the display row. Since this is a by-row table, [ROW] is selected in the Fill-in by option.

17. Select [COLUMN] and then select [DONE].

18. Position the caret in the first field of the first column and press <NEXT>. The caret moves down the column rather than across the rows. Selecting [COLUMN] allows you to change the fill-in order.

19. Select [CLOSE].

Header property sheet

The header property sheet is also found within the table property sheet. This sheet controls the appearance of the column headings.

To display the header property sheet, select [HEADER] on the display row of the table property sheet (Figure 9-6).

In the following exercise, you change the properties within a column heading.

1. **Open TA PR 9-3.**

2. **Select [EDIT].**

3. **Select the table and press <PROP'S>.**

4. **Select [HEADER] in the display row.**

   NOTE: The options within the Contents option are used to align the text horizontally and vertically within the column headings. Text entered from the keyboard into a new table is centered horizontally and vertically.

   Notice that the text within the column headings of this table does not look well aligned.

5. **Select [CENTERED] next to the Horizontally option.**
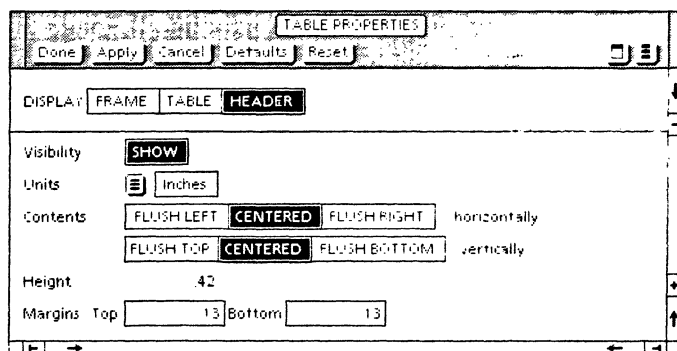
Figure 9-6 Header property sheet

6. **Select** [APPLY]. City and State and Phone Number are now centered horizontally.

7. **Select** [CENTERED] next to the Vertically option.

8. **Select** [APPLY]. Address and Birthday are now centered vertically.

   The Height option displays the current height of the column headings. A new table has a column height of 0.41 inch. The height of this table's column headings is 0.64 inch. Column heading heights expand for the text.

   The Margins option is used to set the top and bottom margins of the column heading entries. This table has a margin of 0.15 inch at the top and bottom of the text.

9. **Delete** 0.15 in the appropriate boxes for the top and bottom margins.

10. **Type:** 0.25 in both.

11. **Select** [DONE]. The space above and below the text has widened slightly.

    NOTE: If you want no column headings in your table, do not select [SHOW] next to the Visibility option. If you want the column headings to remain in the table, select [SHOW].

    The table in your document should look like this:

Address	City and State	Phone Number	Birthday

    By-row table

12. **Select** [CLOSE].

Summary

In this section, you studied how to:

- Use the frame property sheet to change frame properties

- Use the table property sheet to change properties of a table

- Use the header property sheet to change the column heading properties

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

The following pages contain an optional self check exercise.

Self check 9-1

In this section, you have practiced using the frame, table, and header property sheets. In previous sections, you used the ruling line, table column, and table row property sheets. Now you are going to check your knowledge of how to use these property sheets. Open TA SC 9-1 and select [EDIT]. If you need assistance with any of these procedures, turn to the next page for detailed instructions.

1. Stretch the table frame to 1 inch larger than the table.

2. Select the widest border width for the table frame.

3. Type the following in the bottom caption: Personnel Roster.

4. Make table border lines invisible.

5. Make all table lines invisible.

Answers to self check 9-1

1. **To stretch the table frame to 1 inch larger than the table:**

    Select the table at the bottom righthand corner using the select the frame method.

    Press the function key corresponding to <STRETCH>.

    Hold down the left mouse button.

    Move the pointer to the right and down from the frame.

    When the frame is bigger than the table by approximately 1 inch, release the left mouse button.

2. **To select the widest border width for the table frame:**

    Press <PROP'S>

    Select the widest line in the Border Width option.

3. **To type the following in the bottom caption: Personnel Roster:**

    Select [BOTTOM] in the Caption option.

    Delete 0 in the bottom Margin option.

    Type: 0.5.

    Select [DONE].

    Position the caret in bottom caption area of the table.

    Type: Personnel Roster.

4. To make the table border invisible:

Select the table border (the corners of the border become highlighted).

Press <PROP'S>.

Select [NONE] in the Border Style option.

Select [DONE].

5. To make all table lines invisible:

Select a row line with the left mouse button.

Select all other row and column lines with the right mouse button.

Press <PROP'S>.

Select [NONE] in the Border Style option.

Select [DONE].

The table in your document should look like this:

Individual	Extension	Manager
Stacy Allen	5-7037	E. Benson
Steven Hunt	5-4639	E. Benson
Mary Lidar	5-3111	S. Menley
Dick Smith	5-4298	R. Stevenson
John Stone	5-6372	R. Stevenson

Personnel Roster

10.   Final progress check

Throughout this chapter, you have studied how to create specialized tables. Now you are going to test your knowledge by developing a table for the information below.

There are several ways to complete this table. Detailed instructions and an illustration of one way to complete it are contained on the next few pages. Your table may look totally different. As long as the information is displayed, the task has been completed successfully.

Open TA FPC 10-1, which is a blank document, and select [EDIT].   Create a table that includes the following information:

Company: Haleys
Product: Microchips
Annual Sales (millions):   1st Quarter: 24
                                  2nd Quarter: 16
                                  3rd Quarter: 22
                                  4th Quarter: 18
Sales Manager: E. Lambert

Company: Haleys
Product: Disks
Annual Sales (millions):   1st Quarter: 11
                                  2nd Quarter: 7
                                  3rd Quarter: 9
                                  4th Quarter: 10
Sales Manager: J. Jeffries

Company: Bensons Ltd.
Product: Microchips
Annual Sales (millions):

1st Quarter:	12
2nd Quarter:	14
3rd Quarter:	10
4th Quarter:	9

Sales Manager: A. Monteil

Company: BTE Research
Product: Microchips
Annual Sales (millions):

1st Quarter:	26
2nd Quarter:	20
3rd Quarter:	22
4th Quarter:	24

Sales Manager: T. Brown

Company: BTE Research
Product: Disks
Annual Sales (millions):

1st Quarter:	43
2nd Quarter:	35
3rd Quarter:	26
4th Quarter:	39

Sales Manager: H. Valenzuela

Company: Tyson-Ford
Product: Microchips
Annual Sales (millions):

1st Quarter:	38
2nd Quarter:	31
3rd Quarter:	29
4th Quarter:	40

Sales Manager: C. Riverside

Refer to the following pages for detailed instructions
on how to perform this exercise.

Answers to final progress check

The numbers in parentheses indicate the sections in which you will find details on each procedure.

1. **To enter a by-row table: (2)**

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <F>.

   Release <KEYBOARD>.

2. **To add two columns using the copying a column method: (5)**

   Select one column using the select-adjust method.

   Select the second column with the right mouse button.

   Press <COPY>.

   Position the pointer on the right line of the last column.

   Click the left mouse button on that line.

3. **To add two rows using the <NEXT> method: (5)**

   Position the caret in the last field of the last row.

   Press <NEXT>.

   Press <NEXT> four more times

4. To divide the second column: (6)

Select the second column using the select-adjust method.

Press <PROP'S>.

Select [DIVIDED].

Delete 0 next to the Subcolumns option.

Type: 1.

Select [REPEATING].

Select [DONE].

5. To divide the third column: (6)

Select the third column using the select-adjust method.

Press <PROP'S>.

Delete 1.2 next to the Width option.

Type 2.

Select [APPLY].

Select [DIVIDED].

Select [REPEATING].

Delete 0 next to the Subcolumns option.

Type: 4.

Select [DONE].

6. To divide the fourth column: (6)

Select the fourth column using the select-adjust method.

Press <PROP'S>.

Select [DIVIDED].

Delete 0 next to the Subcolumns option.

Type: 1.

Select [REPEATING].

Select [DONE].

7. **To enter column headings: (3)**

   Position the caret in the first column heading.

   Type: Company.

   Press <NEXT>.

   Type: Product.

   Press <NEXT> twice.

   Type: Annual Sales (Millions) (2 lines).

   Press <NEXT>.

   Type: 1st Qtr. (2 lines).

   Press <NEXT>.

   Type: 2nd Qtr. (2 lines).

   Press <NEXT>.

   Type: 3rd Qtr. (2 lines).

   Press <NEXT>.

   Type: 4th Qtr. (2 lines).

   Press <NEXT>.

   Type: Sales Manager.

8. **To enter text into the table: (3, 7)**

   Position the caret in the first field of the first column.

   Type: Haleys.

   Press <NEXT>.

   Type: Microchips.

   Press <NEXT>.

Type: Disks.

Position the caret in the first field of the first subcolumn (labeled 1st Qtr).

Type: 24.

Press <NEXT>.

Type: 16.

Press <NEXT>.

Type: 22.

Press <NEXT>.

Type: 18.

Press <NEXT>.

Type: 11.

Press <NEXT>.

Type: 7.

Press <NEXT>.

Type: 9.

Press <NEXT>.

Type: 10.

Position the caret in the first field of the last column.

Type: E. Lambert.

Press <NEXT>.

Type: J. Jeffries.

Position the caret in the second field of the first column.

Type: Bensons Ltd.

Press <NEXT>.

Type: Microchips.

Position the caret in the second field of the first subcolumn (labeled 1st Qtr).

Type: 12.

Press <NEXT>.

Type: 14.

Press <NEXT>.

Type: 10.

Press <NEXT>.

Type: 9.

Position the caret in the second field of the last column.

Type: A. Monteil.

Position the caret in the third field of the first column.

Type: BTE Research.

Press <NEXT>.

Type: Microchips.

Press <NEXT>.

Type: Disks.

Position the caret in the third field of the first subcolumn labeled 1st Qtr.

Type: 26.

Press <NEXT>.

Type: 20.

Press <NEXT>.

Type: 22.

Press <NEXT>.

Type: 24.

Press <NEXT>.

Type: 43.

Press <NEXT>.

Type: 35.

Press <NEXT>.

Type: 26.

Press <NEXT>.

Type: 39.

Position the caret in the third field of the last column.

Type: T. Brown.

Press <NEXT>.

Type: H. Valenzuela.

Position the caret in the fourth field of the first column.

Type: Tyson-Ford.

Press <NEXT>.

Type: Microchips.

Position the caret in the fourth field of the first subcolumn.

Type: 38.

Press <NEXT>.

Type: 31.

Press <NEXT>.

Type: 29.

Press <NEXT>.

Type: 40.

Position the caret in the fourth field of the last column.

Type: C. Riverside.

9. To change the table border: (9)

Select the table.

Press <PROP'S>.

Select the second darkest border width (the same as the the column and row lines).

Select [DONE].

The table in your document could look like this:

Company	Product	Annual Sales (Millions)				Sales Manager
		1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	
Haleys	Microchips	24	16	22	18	E. Lambert
	Disks	11	7	9	10	J. Jeffries
Bensons Ltd.	Microchips	12	14	10	9	A. Monteil
BTE Research	Microchips	26	20	22	24	H. Valenzuela
	Disks	43	35	26	39	T. Brown
Tyson-Ford	Microchips	38	31	29	40	C. Riverside

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FORMS

XEROX

VP Series Training Guide
Version 1.0

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Table of contents

Part II: Creating forms

Introduction

The VP Document Editor software allows you to create forms by inserting fields into a document. These fields are then filled in by the form user. Each time the form is used, the key information is inserted into blank spaces in the form, instead of recreating the entire form from scratch.

There are two main tasks involved in using forms: the initial creation of the form and the subsequent insertion of information into the form each time it is used. This chapter describes how to create, fill in, and edit forms. It consists of a self-paced series of exercises designed to help you learn the basics so that you will feel confident working with forms.

The chapter is divided into two parts. Part I, "Filling in Forms," describes how to fill in any form. This part is designed to provide you with the general concepts and practice necessary to fill in the fields of any form letter or standard form available on your workstation. Part II, "Creating Forms," describes how to create a form. This part is designed to provide you with the general concepts and practice necessary to create any form containing fields.

Getting started

If you are interested only in filling in forms and are not interested in creating forms, complete Part I. If you are interested in creating forms, complete Part I and Part II.

Before you begin this chapter, you should know how to use VP Document Editor software. If necessary, read the chapters titled "Document Creation," and "Basic Graphics" in this self study guide.

To complete this chapter, you need a 6085 Professional Computer System or an 8010 Information System with VP Document Editor software installed and running. To verify that this software package is installed and running, open the application loader, which is located in the workstation divider of the directory. If the software package is not displayed when you open the application loader, or if its status is set to idle, refer to the "Application Loader" chapter of the "Xerox ViewPoint" self study guide.

Additionally, you need the training disk labeled VP Training Exercises.

PART I: Filling in forms

1.   Introduction

Frequently the same document, with certain parts changed, is sent to many individuals. You have probably received a form letter in which your name and address have been inserted throughout the letter. Perhaps you have ordered items from a catalog and filled in the accompanying form with the appropriate information (for example, item number, description, amount, size, number, and so forth). Figures 1-1 and 1-2 are examples of such forms.

                                                              Γ⅃

Dear: Γ⅃,

    This is to remind you that you have an appointment with Mr. Jones on Γ⅃ at Γ⅃. Please call the office if you are unable to keep your appointment. Thank you.

                                                           Sincerely,

---

Figure 1-1 **Form letter**

Order Form

Name: ⌈Mary Brown⌋	Phone: ⌈679-3056⌋		
Address: ⌈23 North St. L.A. Calif., 90045⌋			
Item No.	Quantity	Price Each	Total Price
⌈857⌋	⌈1⌋	⌈6.00⌋	⌈6.00⌋
⌈322⌋	⌈2⌋	⌈2.00⌋	⌈4.00⌋
⌈⌋	⌈⌋	⌈⌋	⌈⌋
⌈⌋	⌈⌋	⌈⌋	⌈⌋
		Subtotal	⌈10.00⌋
		Tax	⌈ .65⌋
		Total	⌈10.65⌋

Figure 1-2 **Order blank**

Notice the symbols in Figure 1-3. These brackets are called *field bounding characters*. A *field* represents a place in a document where information can be inserted later. Information entered into a field is placed between the two field bounding characters.

Field bounding characters: ⌈⌋

Left field bounding character: ⌈

Right field bounding character: ⌋

Figure 1-3 **Field bounding characters**

Fields are placed in a document wherever information changes regularly. Moving from one field to another can be done without touching those parts of the document that never change. Fields also can be automatically filled in by the system.

For example, a lawyer could create a form letter and insert fields for the areas containing information that changes with each client. He or she could then quickly complete a specific client's letter by going right to those fields and entering information pertaining to that client.

This part is designed to provide you with the general concepts and practice necessary to fill in the fields of any form letter or standard form available on your workstation.

After completing Part I, you should be able to:

- Enter and edit text in a field

- Move from one field to another

- Make the fields in a document visible

- Use automatic error checking

- Use automatic field fill-in

Getting started

This part is divided into sections. Each section introduces a number of related concepts. When these concepts involve on-line practice, exercises are included. When necessary, you test your knowledge with a self check; at the end of your training, you review all the skills taught with a final progress check.

When a term that is new or unique is introduced, it is italicized and placed in boldface type. You can find a more detailed explanation of each term in the "Glossary" tab of the VP Series reference library.

To get started, you need the folder titled VP Forms on the VP Training Exercises floppy disk. Within the folder are all the documents necessary to complete this self study guide.

You will find the following types of documents in this folder:

- Form Fill-in PRactice documents (for example, FF PR 2-1)

- Form Fill-in Self Check documents (for example, FF SC 3-1)

- Form Fill-in Progress Check documents (for example, FF PC 5-1)

At this point, you are ready to load the VP Training Exercises floppy disk onto your desktop. To review the procedure for loading a floppy disk, refer to the chapter titled "Floppy Utility" in the "Xerox ViewPoint" self study guide. The floppy disk drive is optional hardware for the 6085. If your system does not have a disk drive, you can obtain the training exercises over the network. See your System Administrator regarding where these files are located.

You can copy the VP Forms folder and rename it. This automatically allows you to work with a copy of the original documents and to store your completed practices.

Beginning with this introduction, continue through each section sequentially, at your own pace, until you have mastered the skills taught. Your training should take approximately 2 hours.

While you are completing this chapter, it is advisable that you have the tab titled "VP Document Editor" in the VP Series reference library available for easy referral.

2. Manual form editing

Overview

In order to fill in a form, you must be able to move from one field to another, as well to enter and edit text within a field.

After completing this section, you should be able to make fields visible, place the caret in the first field, enter text into a field, move to the next field using the mouse or <NEXT>, and edit text within a field.

Making fields visible

Field bounding characters are not always visible in a document. To make them visible, select [SHOW STRUCTURE] in the document auxiliary menu. To make them invisible, select [DON'T SHOW STRUCTURE] in the document auxiliary menu. In your sample document, the field bounding characters are already visible. However, in other documents you must ...ake them visible yourself.

In the following exercise, you make the field bounding characters visible and invisible.

1. **Open** practice document FF PR 2-1.

2. **Select** [EDIT] in the document header.

   This is a simple form letter.

3. **Select** [DON'T SHOW STRUCTURE] in the document auxiliary menu. (Notice that the field bounding characters are no longer visible.)

4. Select [SHOW STRUCTURE] in the document
    auxiliary menu. (The field bounding characters
    are visible again.)

NOTE: Field bounding characters do not have to be
visible to fill in the fields; they are merely aids to help
you locate the fields.

Starting form fill-in

Each form has a field fill-in order that determines the
order in which the fields are to be filled in. Complete
the form letter by entering text in the fields in their
fill-in order.

In the following exercise, you start form fill-in.

1. Select the document auxiliary menu symbol.

2. Select [GO TO FIRST FILL-IN] in the menu.

    A caret appears in the field following "Dear."
    This is the first field in the form's fill-in order.

Entering text into a field

Before a field can be filled in, it must contain the
flashing caret.

In the following exercise, you enter text into a field.

1. **Verify** that the caret is in the first field (the caret
    must follow the word "Dear").

2. **Type:** Mr. Jones.

    "Mr. Jones" is inserted in the field.

Moving to the next field

Pressing <NEXT> moves the caret to the next field to be filled in.

In the following exercise, you move from field to field using <NEXT>.

1. **Press** <NEXT>. (<NEXT> is in the group of function keys on the right side of the keyboard.)

   Notice that the caret is now in the next field in the document.

2. **Type**: Thursday, January 31.

3. **Press** <NEXT>.

4. **Type**: 11:00 AM.

5. **Press** <NEXT> A message is posted that there are no more fields in the fill-in order to be filled in.

   NOTE: If a field cannot be accessed by pressing <NEXT>, it may not be included in the fill-in order. To place the caret in fields not included in the fill-in order, you must use the mouse.

Placing the caret with the mouse

In addition to placing the caret using <NEXT>, you can also place it with the mouse. This is the same as selecting any position in which you want to enter text.

In the following exercise, you place the caret with the mouse.

1. **Point** at the left field bounding character of the empty field at the top of the page.

2. **Click** the left mouse button. The flashing caret appears in the field. The field is now ready to be filled in.

   NOTE: Be careful not to select the field's right symbol; otherwise, the caret will appear in the wrong place, after the field rather than inside it.

3. **Type**: January 23, 1985.

Editing text within fields

If you make an error when you enter text into a field, you can correct it easily by selecting the text and editing it as you would edit any other text on your workstation.

Text requiring editing can be selected with the mouse or <NEXT>. When <NEXT> is used to move through the fields, all the text in the field is selected. Use <NEXT> when all the information in a field needs to be replaced; otherwise, using the mouse is more convenient.

In the following exercise, you change text using the mouse:

1. **Select** the "r" in Mr. Jones.

2. **Press** <DELETE>.

3. **Type**: s.

4. **Press** <NEXT>. The next field's contents are selected.

5. **Press** <DELETE>.

6. Type: Friday, February 1.

NOTE: Text in a field can have the same actions performed on it as text in a document. You can make it bold, italicized, smaller or larger. Additionally, you can move, copy, or delete it. You can also change the font of text within a field. You perform these actions as described in the chapter titled "Document Creation."

7. Close and delete the practice document.

Summary

In this section, you studied how to:

● Use [SHOW STRUCTURE] to make fields visible

● Use [GO TO FIRST FILL-IN] to start form fill-in

● Enter text into a field

● Use < NEXT> or the mouse to move from one field to another

● Edit text in a field

If you need more practice, complete the exercises again. To do this, use a new copy of the practice document for this section.

Chapter 3 is an optional self check exercise.

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3. Self check

Now that you are familiar with filling in fields, you are going to practice filling in a form letter. Open self check document FF SC 3-1 and select [EDIT]. If you need assistance, turn to page I-3-3 for detailed instructions.

Your form should look like the one on the following page after you complete this self check.

1. Display the field bounding characters.

2. Place the caret in the first field.

3. Enter the following information in the appropriate field:

   First field: Judge Joe B. Fair
                     83 Burton Place
                     Denver, Colorado 80000

   Second field: Judge Fair

   Third field: Finance Department

   Fourth field: $75

   Fifth field: 10/18/85

   Sixth field: $150

4. Change the following information:

   Third field: Finance to Marketing

   Sixth field: $150 to $200

   Close and delete your practice document when you are finished.

Filled-in form letter:

⌜Judge Joe B. Fair
83 Burton Place
Denver, Colorado 80000⌟

Dear ⌜Judge Fair⌟,

The Payroll Savings Plan has been in effect for almost a year.
Participation has been tremendous.

Our records from the ⌜Marketing Department⌟ show that
you currently have ⌜$75⌟ withheld from your paycheck
weekly. The balance of your account as of ⌜10/18/85⌟ was
⌜$200⌟.

Please take a moment to decide if you would like to increase
your weekly withdrawal. Fill out the attached form
accordingly and return to personnel.

Sincerely yours,

Frank N. Stein
Personnel Manager

Figure 3-1 Filled-in form letter

Answers to self check

1. **To display the field bounding characters:**

   Select [SHOW STRUCTURE] in the document auxiliary menu.

2. **To place the caret in the first field:**

   Select [GO TO FIRST FILL-IN] in the document auxiliary menu.

3. **To fill in the fields:**

   Type:

   > Judge Joe B. Fair
   >
   > 83 Burton Place
   >
   > Denver, Colorado 8000

   Press < NEXT > .

   Type: Judge Fair.

   Press < NEXT >.

   Type: Finance Department.

   Press < NEXT >.

   Type: $75.

   Press < NEXT >.

   Type: 10/18/85.

   Press < NEXT >.

   Type: $150.

4. To edit text in fields:

Note: You can select the text with the mouse as described below, or you can use <NEXT> to move through the fields until the proper field is selected.

Select: Finance.

Press <DELETE>.

Type: Marketing.

Select: $150.

Press <DELETE>.

Type: $200.

4. Automatic form editing

Overview

You have entered information in a field and moved from field to field manually. The system also has mechanisms to automatically check for errors and fill in fields. These automatic functions are discussed in this section.

After completing this section, you should be able to instruct the system to check for errors in field entries and instruct the system to fill in fields automatically.

Automatic field error checking

Fields can have restrictions placed on them that allow only certain types of information to be entered. For example, restrictions can be placed on the types of characters entered into a field. If you move through the fields with <NEXT>, the system checks what has been typed in a field against that field's restrictions. You receive a message regarding incorrect information when you try to leave an incorrectly filled-in field with <NEXT>. If you move through the fields with the mouse, however, the fields are not checked, and you do not receive any messages regarding incorrect information.

You can instruct the system to check the contents of all the fields whenever you suspect the information entered is incorrect. If an error is found, the contents of the field are selected, and an error message appears. This procedure is called updating fields.

In the following exercise, you select [UPDATE FIELDS] in the document auxiliary menu and make any corrections by editing the text in the fields.

1. **Open** practice document FF PR 4-1.

2. **Select** [EDIT] in the document header.

3. **Select** [UPDATE FIELDS] in the document auxiliary menu. The system now begins to check the validity of the fields.

   The phone number field is selected, indicating that it is in error. Whenever an error is found, the system selects the contents of the field and displays an error message.

4. **Press** the backspace key. (This field was set to hold only eight characters; therefore, it does not accept 679-30566, which is nine characters long.)

5. **Select** [UPDATE FIELDS]. This time no errors are found. A message appears in the message window, stating that all fields have been updated.

NOTE: After an error is found in a field, you are no longer in the updating mode. The system does not continue the checking process until you start the procedure over by selecting [UPDATE FIELDS] again. Each time you start the updating procedure, the system starts from the first field in the document and checks each field until an error is found.

Automatic field fill-in

Earlier, you filled in fields by typing from the
keyboard. Fields also can be filled in automatically by
the system. You can program your workstation to
perform certain actions, such as copying the contents
of one field into another. You also can define a
specific rule so that the system takes information
contained in a field, combines it with information
from another field, and places the sum, difference,
product, or quotient of these fields into another field
automatically.

For example, when you buy gas, the pump registers
price per gallon, the number of gallons bought, and
the total amount of your bill. The register
automatically multiplies the number of gallons by the
price per gallon to give the total price. This is the kind
of automatic calculation that fill-in rules provide.

Defining a specific rule for automatic fill-in requires
that you be familiar with the language necessary for
writing the expression. This programming language
and its uses are described in the chapter titled "Fill-In
Rules."

If fill-in rules exist in a document you are using, they
automatically go into effect whenever you enter or
exit a field with such a rule by using <NEXT> or
selecting [UPDATE FIELDS]. Field update is very
important when you have automatic fill-in. If you
change a number in one field, it may make the total in
another field wrong. By selecting [UPDATE FIELDS], a
new calculation is done whenever a field is changed,
and the affected numbers are corrected.

Your practice document has some fields set to fill in
automatically.

In the following exercise, you use automatic fill-in.

1. Click the left mouse button on the words: Item No.

2. Press <NEXT>.

3. Type: 2345.

4. Press <NEXT>.

5. Type: 3.

6. Press <NEXT>.

7. Type: 5.00.

8. Press <NEXT>. Notice that the total price of $15.00 has been entered automatically, and the caret has been placed in the next Item field.

9. Type: 1672.

10. Press <NEXT>.

11. Type: 2.

12. Press <NEXT>.

13. Type: 10.00.

14. Press <NEXT>. Notice that the total price of $20.00 has been entered automatically.

15. Select [UPDATE FIELDS] in the window auxiliary menu.

    The cursor takes on the shape of an hourglass while the fields are updated. Once computation is complete, the cursor reappears. The subtotal, tax, and total have automatically been updated.

16. Close and delete your practice document.

NOTE: When you are using <NEXT> or [UPDATE FIELDS] in a document with fill-in rules, pressing <STOP> terminates the fill-in process after the field being computed is finished.

Summary

In this section, you studied how to:

● Instruct the system to automatically check for field errors

● Use the automatic field fill-in feature

If you need more practice, complete the exercises again. To do this, use a new copy of the practice document for this section.

After you finish the progress check in Chapter 5, you will have completed the training for form fill-in. If you wish to create forms, continue with "Part II: Creating Forms." Refer to the sub-tab titled "Fields" in the VP Series reference library for more information on this feature.

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5.   Progress check

You should now know how to fill in fields in a document.   To check what you have learned, complete each of the following tasks. Open progress check document FF PC 5-1 and select [EDIT].

Your form should look like the one on the following page after you complete this progress check.

1. Display the field bounding characters.

2. Rename Mr. DuVon's supervisor to "Cain."

3. Change Mr. Argon's salary to 1900.

4. Enter a new employee:

    Name: Mr. Bruce Johnson
    Employee Number: H72J
    Salary: $650
    Supervisor: Bailey

5. Instruct the system to update the fields.

    The total salary should now be $4750.

6. Close and delete your practice document when you are finished.

Your exercise form should look like the one in below.

Employee	Employee Number	Salary	Supervisor
⌈Mr David DuVon⌋	⌈A42D⌋	$⌈1500⌋	⌈Cain⌋
⌈Mr. Morton Argon⌋	⌈B26C⌋	⌈1900⌋	⌈Cain⌋
⌈Mr. Howard Barton⌋	⌈G14H⌋	⌈700⌋	⌈Bailey⌋
⌈Mr Bruce Johnson⌋	⌈H72J⌋	⌈650⌋	⌈Bailey⌋

| Total Salary | | $⌈4750⌋ | |

PART II: Creating forms

1. Introduction

You can use fields, along with graphics and tables, to create any type of form that is needed in your office.

In Part I, "Filling in Forms," you filled in a form letter. In this part, you manipulate and create forms, including entering fields, setting the field fill-in order, setting field properties, and creating a form with graphics.

This part is designed to provide you with the general concepts and practice necessary to create any form containing fields.

After completing Part II, you should be able to:

- Insert fields

- Set and add to the field fill-in order

- Set field name and description prompts on the field property sheet

- Set type, format, and range restrictions for a field's contents

- Use the field summary property sheet

- Create a form with graphics

Getting started

This part is divided into sections. Each section introduces a number of related concepts. When these concepts involve on-line practice, practice exercises are included. When necessary, you test your knowledge with a self check; at the end of your training, you review all the skills taught with a final progress check.

When a term that is new or unique is introduced, it is italicized and placed in boldface type. You can find a more detailed explanation of each term in the "Glossary" tab of the VP Series reference library.

To get started, you need the folder titled VP Forms on the VP Training Exercises floppy disk. Within the folder are all the documents necessary to complete this self study guide.

You will find the following types of documents in this part:

- Creating Fields PRactice documents (for example, CF PR 1-1)

- Creating Fields Self Check documents (for example, CF SC 3-1)

- Creating Fields Progress Check documents (for example, CF PC 12-1)

At this point, you are ready to load the VP Training Exercises floppy disk onto your desktop. To review the procedure for loading a floppy disk, refer to the chapter titled "Floppy Utility" optional hardware in the "Xerox ViewPoint" self study guide.

You can copy the VP Forms folder and rename it. This automatically allows you to work with a copy of the original documents and to store your completed practices.

Beginning with this introduction, continue through each section sequentially, at your own pace, until you have mastered the skills taught. Your training should take approximately 4 hours.

While you are completing this chapter, it is advisable that you have the tab titled "VP Document Editor" in the VP Series reference library available for easy referral.

2. Entering and editing fields

Overview

The first step in creating a form is to enter and manipulate field bounding characters in a document.

After completing this section, you should be able to show the field structure, enter and select a field, and move, copy, or delete it.

Showing field structure

In order to enter fields, it is necessary to show the field structure.

In the following exercise, you use [SHOW STRUCTURE] to make field bounding characters visible when they are inserted.

1. **Open** practice document CF PR 2-1.

   A window opens and displays the sample document (Figure 2-1). There are no fields in the document at present.

This letter is to verify the information contained in our files. Listed below is the data we are concerned with. Please check to see if our information is accurate and notify us of any errors.

Employee Name :
Employee# :
Birthdate :
Phone# :   Ext. :

Figure 2-1 **Sample document**

2. Select [EDIT] in the document header.

   You are going to enter some fields into your practice document. Before entering the fields, however, you should select [SHOW STRUCTURE] to make the field bounding characters visible.

3. Select [SHOW STRUCTURE] in the document auxiliary menu.

NOTE: When you are saving a form, it is recommended that you save it with the structure visible, so the field bounding characters are visible when you (or someone else) fills in the form.

Entering fields

In the following exercise, you enter fields into a document from the special keyboard.

Entering a field for Employee Name:

1. Select the colon (:) after the words Employee Name.

2. Hold down < KEYBOARD > Remember to keep < KEYBOARD > held down for the next two steps.

3. **Press** the function key corresponding to <SPECIAL>.

4. **Press** the key corresponding to the field bounding characters <Z> on the standard keyboard. (You must be holding down <KEYBOARD> when you press <Z> .)

   A field (Γ⅃) is entered after the words: Employee Name.

5. **Release** <KEYBOARD>.

Entering additional fields for Employee # and Birthdate:

6. Select the colon after Employee #.

7. **Hold down** <KEYBOARD>.

8. **Press** the function key corresponding to <SPECIAL>.

9. **Press** <Z>. (You must be holding down <KEYBOARD> when you press <Z>.)

10. **Release** <KEYBOARD>.

11. Select the colon after Birthdate.

12. **Hold down** <KEYBOARD>.

13. **Press** the function key corresponding to <SPECIAL>.

14. **Press** <Z>.

15. **Release** <KEYBOARD>.

Selecting fields

Fields can be selected by pointing at one of the field symbols and clicking the left mouse button twice.

In the following exercise, you select a field.

1. **Point** at the left field symbol for the Employee Name field.

2. **Click** the left mouse button twice.

   The field is now selected. When a field is selected, both the left and right field bounding characters are highlighted.

Editing fields

Fields can be moved, copied, and deleted the same as text.

In the following exercise, you copy fields.

Copying fields:

1. **Select** the field after Birthdate.

2. **Press** <COPY>.

3. **Select** the colon (:) after Phone #.

   A field is entered after Phone #.

4. **Press** <COPY>.

5. **Select** the colon (:) after Ext.

   A field is entered after Ext.

6. **Close and delete** the practice document.

Fields are moved and deleted as follows:

Moving a field:

- **Select** the field that was entered after Ext.

- **Press** <MOVE>.

- **Select** a place in the document for the destination. (specify where)

Deleting a field:

- **Select** the field.

- **Press** <DELETE>.

Summary

In this section, you studied how to:

- Use [SHOW STRUCTURE] to display field structure

- Use the special keyboard to enter a field in a document

- Use the mouse to select a field

- Use <COPY>, <MOVE>, and <DELETE> to edit fields

If you need more practice, complete the exercises again. To do this, use a new copy of the practice document.

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3. Setting field fill-in order

Overview

When fields are entered into a document, there is no fill-in order. The fill-in order is what allows you to move from one field to another using <NEXT>. To set the fill-in order, select [SET FILL-IN ORDER] in the document auxiliary menu.

After [SET FILL-IN ORDER] is selected, fields are added to the fill-in order by pointing at either field bounding character of each field and clicking the left mouse button. The new fill-in order is determined by the order in which the fields are selected. For example, if the third field in the document is selected first, that field is first in the fill-in order. When all the fields in the fill-in order have been selected, select [END FILL-IN MODE] in the document auxiliary menu.

After completing this section, you should be able to set the fill-in order for the fields in a document and add fields to the fill-in order.

Setting the fill-in order

The fill-in order determines the order in which a form user progresses through the form.

1. **Open** practice document CF PR 3-1.

2. **Select** [EDIT] in the document header.

3. **Select** [SET FILL-IN ORDER] in the document auxiliary menu.

4. **Select** either field bounding character for the field after Employee #.

5. **Select** either field bounding character for the field after Employee Name.

6. **Select** either field bounding character for the field after Birthdate.

7. **Select** either field bounding character for the field after Phone #.

8. **Select** either field bounding character for the field after Ext.

9. **Select** [END FILL-IN MODE] in the document auxiliary menu.

   NOTE: Once the fill-in order has been set, you can verify that it is correct by selecting the first field and then pressing <NEXT> to move through the remaining fields.

10. **Select** [GO TO FIRST FILL-IN] in the document auxiliary menu. (The caret is placed in the first field of the fill-in order: the field after Employee #.)

11. **Press** <NEXT>. (The caret is now in the Employee Name field.)

The fill-in order is now Employee #, Employee Name, Birthdate, Phone #, and Ext.

Adding fields to the fill-in order

After setting up a form, you may find that you forgot to include one or more fields in the fill-in order. Rather than redefining the entire fill-in order with [SET FILL-IN ORDER], use [APPEND TO FILL-IN ORDER] to add fields to the end of the fill-in order.

In the following exercise, you add a field to the bottom of your form, and add it to the fill-in order.

1. **Select** the right field bounding character after Ext.

2. **Press** the new paragraph key.

3. **Type**: Supervisor's Name :

4. **Enter** a field.

    a. **Hold** down <KEYBOARD>.

    b. **Press** the function key corresponding to <SPECIAL>.

    c. **Press** the function key corresponding to the field bounding characters (<Z> on the standard keyboard).

    d. **Release** <KEYBOARD>.

Appending the new field to the fill-in order:

5. **Select** [APPEND TO FILL-IN ORDER] in the document auxiliary menu.

6. **Select** either field bounding character for the new field.

7. **Select** [END FILL-IN MODE] in the document auxiliary menu.

The field after Supervisor's Name has become the last field in the fill-in order. The fill-in order is now: Employee #, Employee Name; Birthdate, Phone #, Ext., and Supervisor's Name.

NOTE: Obviously, the field bounding characters must be visible in a document to be added to the fill-in order. If they are not visible when [SET FILL-IN ORDER] or [APPEND TO FILL-IN ORDER] is selected, the system automatically makes the field symbols visible until [END FILL-IN MODE] is selected.

Summary

In this section, you studied how to:

- Use [SET FILL-IN ORDER] to define the order in which fields are filled in

- Use [APPEND TO FILL-IN ORDER] to add fields to the fill-in order

If you need more practice, complete the exercises again.

4.   Field property sheet

Overview

Fields have several properties. Each field has a name, and it may also have a description. Special restrictions can be set for a field so that only certain text can be entered. A Field can also contain a fill-in rule, so that the system automatically fills in the field.

After completing this section, you should be able to display the field property sheet.

Displaying the field property sheet

The properties of a field are set on the field property sheet (Figure 4-1). To display the field property sheet, select a field and press <PROP'S>.

In the following exercise, you display the field property sheet.

1. **Select** the field after Employee Name. Position the mouse on either field symbol (Γ⅃) and click the left mouse button twice.

2. **Press** <PROP'S>. The field property sheet appears. The sections which follow describe the various field properties and how to use them.

3. **Close** the property sheet.

Figure 4-1 **Field property sheet**

Summary

In this section, you studied how to display the field property sheet.

If you need more practice, complete the exercise again.

5. Setting field names and descriptions

Overview

All fields within a document must have unique names. Names are necessary for fill-in rules. Fields are automatically named when they are entered into a document. (For example, the first field entered would be automatically named Field1, the second field entered would be Field2, and so on.) You can rename fields by using the field property sheet.

NOTE: If a field is moved or copied into a document, and it has the same name as another field already in the document, the field is automatically renamed.

Prompts describe what a field is and what information the field should contain. Prompts are displayed in the message area when a field is entered with <NEXT>. Prompts can be very helpful in filling out a form. They can provide hints on the content and format of a field.

The name or description properties of a field are used as *prompts*. The prompt is the field's description, if you have defined one. Otherwise, the prompt is the field's name.

After completing this section, you should be able to set name and description prompts in a form and subsequently display those prompts.

Setting prompts

In the following exercise, you set the prompts for some of the fields in your form.

1. Select the field after Employee #.

2. Press <PROP'S>.

3. Change the field's name to Employee Number.

4. Select [DONE] to close the property sheet.

5. Select the field after Employee Name.

6. Press <PROP'S>.

7. Change the field's name to Employee Name.

8. Press <NEXT>.

9. Type in the field description:

   Employee Name: Last, First Middle Initial.

10. Select [DONE] to close the property sheet.

Prompts have now been set for two of the fields in the form. Now, when someone fills out your form, the prompt "Employee Number" appears when the Employee Number field is entered, and "Employee Name: Last, First Middle Initial" appears when the Employee Name field is entered.

Displaying prompts

Before your prompts are displayed, [PROMPT FOR FIELDS] needs to be selected.

In the following exercise, you select [PROMPT FOR FIELDS].

1. **Select [PROMPT FOR FIELDS]** in the document auxiliary menu.

   Your prompts will now be displayed whenever you move from one field to another with <NEXT>.

2. **Select [GO TO FIRST FILL-IN]** from the document auxiliary menu.

   The caret goes to the Employee # field, and the "Employee Number" prompt appears in the message area.

3. **Press** <NEXT>.

   The caret goes to the Employee Name field, and the "Employee Name: Last, First Middle Initial" prompt appears.

To turn off the prompts, select [DON'T PROMPT FOR FIELDS] in the document auxiliary menu.

Summary

In this section, you studied how to:

● Set name and description prompts in a form

● Display the prompts that you set

If you need more practice, complete the exercises again.

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6. Setting type and format

Overview

You can set restrictions on fields, such as the type of data that can be entered into the field. You also can specify the format of the data. These restrictions are optional. However, if the restrictions are set, the data entered into the field must conform, or it will be rejected. This section discusses how to set two of these restrictions (the Type and Format options) in the property sheet.

These properties are as follows:

- **Type** - The Type option determines the type of data that can be entered into a field. There are four types of fields:

  - **[ANY]** - Allows you to enter any text into a field.

  - **[TEXT]** - Allows you to enter the letters, digits, and symbols that can be entered from the standard keyboard. It cannot contain frames or graphics.

  - **[AMOUNT]** - Allows you to enter numbers and the following number-related characters: + , - , *, period, and comma.

  - **[DATE]** - Allows you to enter a date.

- **Format** - The Format option determines the format of a field. For example, you could define a field containing a phone number to be numeric digits (657-3221, rather than OL7-3221).

  The Format option is described in greater detail later in this section.

- **Language** - The language property is related to the Type and Format options. The selected choice changes the interpretation of amount and date formats to match various language standards. (For example, a date in American English would be represented as 4/21/86, while in British English it would be 21/4/86.)

  After completing this section, you should be able to view the Type option and set a text and date Format option.

Setting the data type option

The choices for data type are [ANY], [TEXT], [AMOUNT], and [DATE]. The possible formats for a field depend on its data type. There is no format for the [ANY] type, since anything can be entered.

If you select either [TEXT] or [AMOUNT] as the data type, the format is defined by entering special format characters in the Format option. These characters are entered with the special keyboard.

In the following exercise, you display the special keyboard to view the field format (and range) characters.

1. Select the field after Employee # in practice document CF PR 3-1.

2. Press <PROP'S>.

3. Select in the Format option of the field property sheet.

4. Hold down <KEYBOARD>.

5. Press the function key corresponding to <SHOW>. The keyboard window appears.

6. Press the format key corresponding to <SPECIAL>.

   The keyboard window (Figure 6-1) is now displaying the field format and range characters.

Figure 6-1 **Keyboard window with field format and range characters**

7. **Release** <KEYBOARD>.

8. **Select** [DONE] to close the property sheet.

9. **Close** the keyboard window.

The format of a field is set by entering these format characters in the Format option. A format character is entered for each character position in the field. For example, if the field is to contain six characters, you enter six format characters in the Format option.

NOTE: You must have the caret in the Range or Format option in the property sheet before you can display the special keyboard that enters the field format and range characters.

Setting format options

There are three types of Format options, depending on whether the data to be entered consists of text, an amount, or a date. Each type of format is discussed in the following paragraphs.

Setting text formats

The format characters used for fields that contain text are as follows:

- [A] = The corresponding character position in the field must be a letter or space. [A] is entered by pressing <A> on the special keyboard.

- [9] = The corresponding character position in the field must be a digit or space. [9] is entered by pressing <9> on the special keyboard.

- [X] = The corresponding character position in the field can be any character. [X] is entered by pressing <X> on the special keyboard.

The format for a text field can also contain characters entered from the regular keyboard. For example, if a field is to contain a phone number, the format could be [9][9][9]-[9][9][9][9]. The hyphen (-) between the special format characters ([9]) would be entered from the regular keyboard. With this format, the field could contain 657-3221, but not OL7-3221.

In the following exercise, you set a restriction on the format for the Employee # field.

1. Select the field after Employee #.

2. Press <PROP'S>.

3. Select [TEXT] for the Type option.

4. **Type** into the Format option: [A] [9] [9] [A].

   a. **Place** the caret inside the Format option.

   b. **Hold down** <KEYBOARD>.

   c. **Press** the function key corresponding to <SPECIAL>.

   d. **Type:** a99a. The following characters are entered into the Format option:
   [A] [9] [9] [A]

   e. **Release** <KEYBOARD>.

5. **Select** [DONE] to close the property sheet.

   The employee number must now consist of a letter, followed by two digits, followed by a letter.

6. **Select** [GO TO FIRST FILL-IN] to get the caret in the Employee # field.

7. **Type:** A$5B

8. **Press** <NEXT>.

   Instead of moving to the next field, an error message appears in the message area, stating that the field's contents have not been entered correctly.

9. **Change** the field contents to read: A45B

10. **Press** <NEXT>.

   The caret now goes to the next field in the fill-in order.

Setting amount formats

If the data entered into an amount field does not match the required format, the system attempts to change the field contents to match the format restriction. If the system cannot do this, an error message is displayed, and the field's contents have to be corrected manually.

Amount formats can be set to:

● Insert a plus or minus sign in front of an amount

● Insert a decimal point in an amount

● Insert commas in an amount

For a full description on setting the format for an amount field, refer to the sub-tab titled "Fields" in the VP Series reference library.

Setting date formats

There are two format choices for date fields. To set the format for a date, type one of the following into the field format property:

● Month Day, Year

This restricts the date format to the form: January 15, 1985.

● MM/DD/YY

This restricts the date format to the form: 01/15/85. (This is the default. If the format is not specified, the date appears in this format.)

In the following exercise, you set the date for the Birthdate field in your practice document.

1. Select the field after Birthdate.

2. Press <PROP'S>.

3. Select [DATE] for the Type option.

4. **Type** in the Format option: MM/DD/YY.

5. **Select** [DONE] to close the property sheet.

Testing the new format:

6. **Place** the caret inside the Birthdate field.

7. **Type**: January 15, 1954.

8. **Press** <NEXT>.

The content of the field is reformatted to read: 1/15/54.

Summary

In this section, you studied how to:

● View the data type

● Set a text format

● Set a date format

If you need more practice, complete the exercises again.

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7.　　Range and length
restrictions

Overview

The Type and Format options restrict the data that can be entered in a field. The Range and Length options of the field property sheet also restrict the content of the field. The Range option controls the range of the field's data. The Length option restricts the number of characters in the field.

After completing this section, you should be able to set Range options for a field.

Range

The Range option is used to define an acceptable range of data for the field. If data is entered into the field that is not within the specified range, the data is not accepted.

For example, a form might list all the employees working in a company and their room numbers. Assume there are 100 rooms in the company's building, and the rooms are numbered from 1 to 100. A restriction could be set on the RoomNo field to limit its content to this range. Then if someone entered the number 300 into the RoomNo field by mistake, the system would reject the number.

In the following exercise, you set this Range restriction.

1. **Type** the following into the Range option of the Room No field in practice document CF PR 3-1:

$$1 \quad \boxed{\rightarrow} \quad 100$$

This restriction is read: Any number from 1 to 100 is acceptable. The symbol

$$\boxed{\rightarrow}$$

is read as "through." It is entered into a range property by pressing the function key corresponding to <SPECIAL> and pressing <2> on the standard keyboard.

Another symbol used in range restrictions is the ellipsis:

$$\boxed{\bullet\ \bullet\ \bullet}$$

This symbol is entered by pressing the function key corresponding to <SPECIAL> and pressing <1> on the standard keyboard. The symbol is read as "any character(s)."

On the following pages are some examples of range restrictions for fields. For additional information on range symbols and range properties, refer to the sub-tab titled "Fields" in the VP Series reference library.

For text fields:

If the range property is specified as:	then the acceptable range of data for that field is:
Smith	"Smith"
Smith [•••]	any text beginning with "Smith"
[•••] Smith	any text ending with "Smith"
[•••] Smith [•••]	any text containing "Smith"
[•••] Jones [•••] Smith [•••]	any text containing "Jones," followed by "Smith"
Jones [→] Smith	any text whose alphabetical order is between "Jones" and "Smith," inclusive
Smith [→]	any text whose alphabetical order is at or after "Smith"
[→] Smith	any text whose alphabetical order is at or before "Smith"

For amount fields:

If the range property is specified as:	then the acceptable range of data for that field is:
100	100
100 →|	any number greater than or equal to 100
→| 100	any number less than or equal to 100
1 →| 100	any number in the range of 1 to 100 (including the numbers 1 and 100)

For date fields:

If the range property is specified as:	then the acceptable range of data for that field is:
1/24/85 →	any date after or equal to 1/24/85
1/1/85 → 12/31/85	any date in 1985

In the following exercise, you set the Range option for a field in your practice document.

1. **Select** the Employee Name field.

2. **Press** <PROP'S>.

   The Description property shows the format for this field as: Last Name, First Middle Initial. Set the range to force a comma separating the last and first names in the field.

3. **Select** [TEXT] for the Type option.

4. **Enter** two sets of ellipses in the Range option.

   a. **Select** inside the range option.

   b. **Hold** down <KEYBOARD>.

   c. **Press** the function key corresponding to <SPECIAL>.

   d. **Press** <1> on the standard keyboard.

      An ellipsis is inserted in the Range option.

   e. **Release** <KEYBOARD>.

   f. **Enter** a comma.

   g. **Hold** down <KEYBOARD>.

   h. **Press** the function key corresponding to <SPECIAL>.

   i. **Press** <1> on the standard keyboard.

      An ellipsis is inserted in the Range option.

   j. **Release** <KEYBOARD>.

5. **Select** [DONE] to close the property sheet.

6. **Place** the caret in the Employee Name field.

7. **Type:** Stone Fred B.

8. **Press** <NEXT>.

   The contents of the field are selected, and an error message is displayed. The field contents do not meet the restrictions of the Range option.

9. **Insert** a comma after the word: Stone.

10. **Press** <NEXT> to verify that the error has been corrected.

NOTE: When setting a restriction on a field, provide complete prompts so that anyone filling out your form can tell what the format should be.

Length

This option is used to define the maximum number of characters allowed in the field. The length of a field is defined by typing a number in the Length option in the field property sheet. For example, if the number 3 is entered, no more than three characters are allowed in the field. In an amount field, you could enter ".10," but ".101" would be too long. In a text field, you could enter "the" but not "there."

Summary

In this section, you studied how to set the Range option for a field.

If you need more practice, complete the exercises again.

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8.   Other field properties

Overview

The remaining properties in the field property sheet are discussed in this section. [REQUIRED], [STOP-ON-SKIP] and [SKIP IF] control the placement of the caret when you press <NEXT> or <SKIP>. (<SKIP> allows you to skip fields in the fill-in order, by holding down <SHIFT> and pressing <NEXT>). The last option in the property sheet is [FILL-IN RULE]. It is used for automatic field fill-in.

The remaining field properties are:

- [REQUIRED] - If this option is set, the field must be filled in. When you press <NEXT> or <SKIP> to leave a field that is empty, and the required option has been set, the caret does not leave the field. Instead, a message is displayed, telling you to fill in the field. (A good place to use this option is the total amount due field on an order blank.)

- [STOP-ON-SKIP] - If this option is set, the caret stops in this field instead of skipping it when you press <SKIP>. This option forces the caret to stop in the field. (The amount due in an order would have this option set.)

- [SKIP-IF FIELD] - This option allows you to skip a field when <NEXT> is pressed. This option has three choices. The first two choices, [EMPTY] and [NOT EMPTY], are dependent on another field. The choices are:

    - [EMPTY] - This option allows you to skip a field if another field is empty. For example, you

could use this option to skip an address field on a form if the name field is empty.

- [NOT EMPTY] - This option allows you to skip a field if another field has been filled in. For example, you could use this option to skip an employee address field when the mailing address field has been filled in.

- [NEVER SKIP] - This option forces the caret to stop when <NEXT> is pressed. This is the default setting for fields when they are entered into a document.

● [FILL-IN RULE] - This option is used for automatic field fill-in by the system. The option may contain a field fill-in rule. These rules are written in a special language described in the chapter on fill-in rules. If you want to create forms in which fields are filled in automatically by the system, read the " Fill-in Rules "chapter.

After completing this section, you should be able to set field properties.

Setting field properties

In the following exercise, you set some field properties.

1. Select the field after Phone #.
2. Press <PROP'S>.
3. Change the field name property to: Phone.
4. Select [DONE] to close the property sheet.
5. Select the field after Ext.
6. Press <PROP'S>.

If the Phone # field is left blank when the form is filled in, the Ext field should be left blank also. Steps 7 and 8 will accomplish this.

7. **Type** the following field name in the [SKIP IF FIELD] property: Phone.

8. **Select** [EMPTY].

9. **Select** [DONE] to close the property sheet.

10. **Select** the field after Supervisor's Name.

11. **Press** <PROP'S>.

12. **Change** the field name property to Supervisor.

13. **Select** [REQUIRED].

14. **Select** [DONE] to close the property sheet.

Testing the property sheet settings:

15. **Place** the caret in the Phone # field.

16. **Press** <NEXT>.

The Ext. field is skipped, since the Phone # field was left blank. The caret is now in the Supervisor's Name field.

17. **Press** <NEXT> again.

A message appears in the message window, stating that the field must be filled in.

18. **Type** the words: Joe Smith.

19. **Press** <NEXT>.

20. **Close** and delete your practice document.

Summary

In this section, you studied how to set field properties.

If you need more practice, complete the exercise again.

Chapter 9 is an optional self check exercise.

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9. Self check 9-1

Now that you are familiar with the properties on the field property sheet, you are going to practice setting the following properties. Open the Self Check document CF SC 9-1 and select [EDIT]. If you need assistance, turn to page II-9-3 for detailed instructions.

1. Set the following properties for the field after Birthdate:

   [NAME] = Birthdate:
   [DESCRIPTION] = Month Day, Year
   [TYPE] = [DATE] and [REQUIRED]
   [STOP ON SKIP]
   [NEVER SKIP]

2. Set the following properties for the field after: Phone #:

   [NAME] = Phone
   [TYPE] = [TEXT] and [REQUIRED]
   [FORMAT] = [9][9][9]-[9][9][9][9]

   (Remember that the 9's must come from the special keyboard, and the hyphen must come from the regular keyboard.)

   [STOP ON SKIP]
   [LENGTH] = 8
   [NEVER SKIP]

3. Type in the birthdate field: 2/13/50.

4. Press <SKIP>.

5. Type: TR3-2479.

6. Press < NEXT >.

   The field is selected, and an error message is displayed. The field was set to hold only digits (no letters).

7. Change TR to: 87.

8. Press < NEXT >.

   The caret is now placed in the next field in the fill-in order.

After checking your answers, leave the practice document open. You will use it in the next exercise.

Answers to self check 9-1

1. **To define the properties for the Birthdate field:**

   Select the field after the word: Birthdate.

   Press <PROP'S>.

   Press <DELETE>.

   Type: Birthdate.

   Press: <NEXT>.

   Type: Month Day, Year.

   Select [DATE] and [REQUIRED] for the Type option.

   Select [STOP ON SKIP].

   Select [NEVER SKIP] in the Skip If field option.

   Select [DONE].

2. **To define the properties for the Phone # field:**

   Select the field following the words: Phone #.

   Press <PROP'S>.

   Select [TEXT].

   Select [REQUIRED].

   Place the caret in the Format option box.

   Hold down <KEYBOARD>.

   Press the function key corresponding to <SPECIAL>.

   Press <9> three times.

   Release <KEYBOARD>.

   Press <->.

   Hold down <KEYBOARD>.

Press the function key corresponding to <SPECIAL>.

Press <9> four times.

Release <KEYBOARD>.

Select [STOP ON SKIP].

Place the caret in the Length option box.

Type: 8.

Select [NEVER SKIP] in the Skip if field option.

Select [DONE].

3. To fill in the fields:

Delete the contents of the birthdate field.

Type: 2/13/50.

Press <NEXT>.

Type: TR3-2479.

The text is inserted in the Phone # field.

Press <NEXT>.

The field is selected, and an error message is displayed. You must correct the field's contents.

Select the letters: TR.

Press <DELETE>.

Type: 87.

Press <NEXT>.

10. Field summary property sheet

Overview

The field summary property sheet lists all the fields and tables in a document in fill-in order, followed by any not in the fill-in order. Field properties can be displayed and changed directly with this property sheet. Table properties can be changed only with the table property sheets.

After completing this section, you should be able to access the field summary property sheet.

Accessing the field summary property sheet

The field summary property sheet allows you to see all fields in your document.

In the following exercise, you display the field summary property sheet for your document.

1. Select any field in your document CF SC 9-1.

2. Press <PROP'S>.

3. Select [SUMMARY] in the display option of the field property sheet.

The fields are listed in their fill-in order (Figure 10-1). Notice the option labeled [PROPERTIES] beside each of the fields.
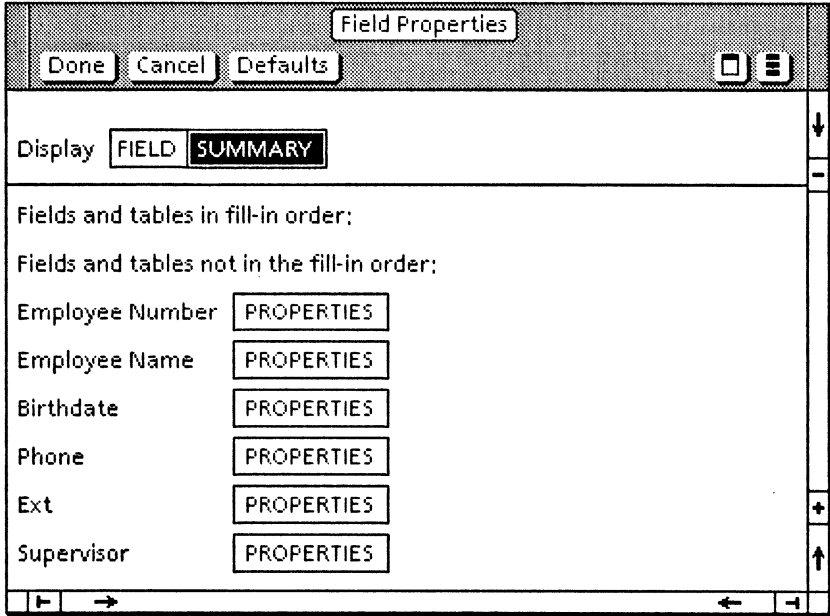
Figure 10-1 Field summary property sheet

4. Select [PROPERTIES] for one of the fields.

The properties for that field will appear (Figure 10-2). These properties can be changed directly in the field summary property sheet.

Figure 10-2 **Field properties**

5. **Close** the property sheet.

6. **Close** your practice document.

You can scroll through the property sheet and change the properties of any field. This is faster than selecting a field and opening its property sheet for each field in the document.

Summary

In this section you studied how to access the field summary property sheet.

If you need more practice, complete the exercise again. Then delete your practice document.

11.   Creating forms with graphics

Overview

You have learned how to insert fields within the text of a document to create forms. Fields can also be used with graphics to create forms like the one in Figure 11-1.

Order Form			

Name: ⌈Mary Brown⌋	Phone: ⌈679-3056⌋
Address: ⌈23 North St. L.A. Calif., 90045⌋	

Item No.	Quantity	Price Each	Total Price
⌈857⌋	⌈1⌋	⌈6.00⌋	⌈6.00⌋
⌈322⌋	⌈2⌋	⌈2.00⌋	⌈4.00⌋
⌈⌋	⌈⌋	⌈⌋	⌈⌋
⌈⌋	⌈⌋	⌈⌋	⌈⌋
		Subtotal	⌈10.00⌋
		Tax	⌈ .65⌋
		Total	⌈10.65⌋
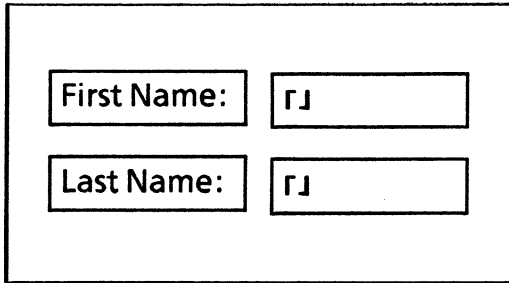
Figure 11-1 **Order form**

After completing this section, you should be able to create a form by inserting a graphic frame into a document, and then inserting text frames and form fields into the graphic frame. Additionally, you

should be able to set the fill-in order of the form and then fill in the form.

Creating forms with graphics

In the following exercise, you create the simple form shown in Figure 11-2.

Figure 11-2 **Basic form**

1. **Open** practice document CF PR 11-1.

2. **Select** [EDIT] in the document header.

3. **Select** [SHOW STRUCTURE] in the document auxiliary menu.

4. **Place** the caret in the document.

Placing a graphic frame in the document:

> **NOTE:** A graphic frame must be inserted into the document before the form can be created.

5. **Insert** a graphic frame.

6. **Magnify** the frame to fill the page.

Adding text and form fields:

> To create the form, text frames and/or form fields need to be inserted into the graphic frame. These frames are found in the basic graphics transfer document.

7. **Retrieve** the basic graphics transfer document. (It may already be on your desktop. If not, get a copy of it from your directory.)

8. **Open** the basic graphics transfer document.

   Inside this document are frames labeled Text Frame and Form Field. The text frames can contain any text. They can also include one or more fields. Each form field contains one field. This field cannot be deleted from its frame. Text can be entered into this field, but not before or after it.

In the following exercise, you copy these frames to your practice document. You may want to turn on the grid for the graphic frame to make placement of the text frames and form fields easier.

1. **Select** the text frame.

2. **Copy** the text frame to your practice document. (See Figure 11-3 for approximate destination.)
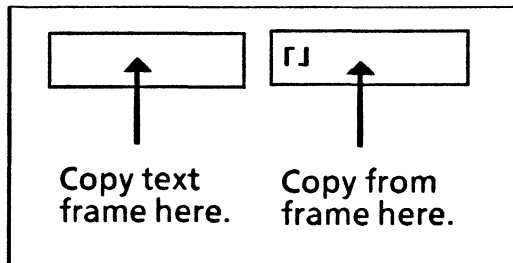
Figure 11-3 **Form creation**

3. **Select** the form field.

4. **Copy** the form field to your practice document. (See Figure 11-3 for approximate destination.)

5. **Close** the basic graphics transfer document.

   The text and form fields can now be copied to create any form.

In the following exercise, you create the form in Figure 11-4.

Figure 11-4 **Finished form**

1. **Copy** the text frame as shown in Figure 11-4.

2. **Copy** the form field as shown in Figure 11-4.

3. **Select** inside the first text frame.

4. **Type**: First Name:

5. **Select** inside the second text frame.

6. **Type**: Last Name:.

Setting the fill-in order for the form:

7. **Select** [SET FILL-IN ORDER] from the document auxiliary menu.

8. **Select** either field bounding character for the field in the first form field.

9. **Select** either field bounding character for the field in the second form field.

10. **Select** [END FILL-IN MODE] from the document auxiliary menu.

The form is now ready to be filled in. The properties for the fields in this form can also be set using the field property sheet.

In the following exercise, you fill in the form.

1. **Select** [GO TO FIRST FILL-IN] in the document.

2. **Enter** your first name in the first field.

3. **Press** <NEXT>.

4. **Enter** your last name in the second field.

Your form has now been created and filled in.

5. **Close and delete** the practice document.

Summary

In this section, you studied how to:

- Create a form by inserting a graphic frame into a document

- Insert text frames into the form

- Insert form fields into the form

- Set the fill-in order for the form

- Fill in the form

If you need more practice, complete the exercise again. To do this, use a new copy of the practice document for this section.

After you finish the progress check in Chapter 12, you will have completed the training for creating forms. Refer to the sub-tab titled "Fields" in the VP Series reference library for more information on this feature.

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12. Progress check

You should now know how to create a form. To check what you have learned, complete the form in the exercise below. Open progress check document CF PC 12-1 and select [EDIT]. The document contains the text for a simple form letter, but no fields.

Your form letter should look like the one on page II-12-4 after you complete the progress check.

1. Insert the necessary fields in CF PC 12-1. Use the form letter below as a guide. It shows the form letter with all the inserted fields.

2. Set the field fill-in order. The fill-in order should be the same as the order of the fields in the document.

Dear ⌈⌋ ,

Our records of ⌈⌋ indicate that you have not placed an order since ⌈⌋ .

Since you have been such a loyal customer in the past, we have reserved for you a special gift of a two-week trip to Cleveland.

In order to receive your special gift, you must order ⌈⌋ dollars worth of merchandise from our catalog before ⌈⌋.

---

3. Set the following properties for each field:

Field 1

[NAME] = Salutation
[DESCRIPTION] = Last Name
[TYPE] = [TEXT] and [REQUIRED]

Field 2

[NAME] = Date
[DESCRIPTION] = Today's Date: Month day, year.
[TYPE] = [DATE] and [REQUIRED]

The format should be in the form of Month day, year.

Field 3

[NAME] = Order Date
[DESCRIPTION] = Last Order Date: Month day, year
[TYPE] = [DATE] and [REQUIRED].

Field 4

[NAME] = Order
[DESCRIPTION] = Amount
[TYPE] = [AMOUNT] and [REQUIRED]

Field 5

[NAME] = Due Date
[DESCRIPTION] = Order Due Date: MM/DD/YY
[TYPE] = [DATE] and [REQUIRED]

4. Request the prompts.

You have now completed creating the form. Test the form by filling it in.

1. Select [GO TO FIRST FILL-IN] in the document auxiliary menu.

The caret should go to the Salutation (Field #1), and the prompt "Last Name" should appear in the message window.

2. Type the words: Mr. Brown

3. Press <NEXT>.

   The caret should go to the next field, and the prompt "Date: Month day, year" should appear.

4. Type: November 18, 1985.

5. Press <NEXT>.

   The caret goes to the next field, and the prompt "Last order date: Month day, year" appears.

6. Type : April 13, 1985.

7. Press <NEXT>.

   The caret should go to the next field, and the prompt "Amount" should appear.

8. Type: 100.00.

9. Press <NEXT>.

   The caret should go to the last field, and the prompt "Order due date: MM/DD/YY" should appear.

10. Type: 12/31/85.

Answers to progress check

You have now finished filling in the form. Your form should look like the one below.

Dear ⌜Mr. Brown⌟,

Our records of ⌜November 18, 1985⌟ indicate that you have not placed an order since ⌜April 13, 1985⌟ .

Since you have been such a loyal customer in the past, we have reserved for you a special gift of a two-week trip to Cleveland.

In order to receive your special gift, you must order ⌜100.00⌟ dollars worth of merchandise from our catalog before ⌜12/31/85⌟.

After checking your answers, close and delete the practice document.

FILL-IN RULES

XEROX

Table of contents

Part 2: Table fill-In rules

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Introduction

With VP Fill-in Rules, your workstation can take information contained in one or more fields of a form, a table, or another document on your desktop and use that information to fill in other fields.

You can use fill-in rules to:

- Automatically enter your name, the date, and the time into a form

- Take information from one place in a form letter and place it in several other places

- Take figures in a form and perform calculations (for example, compute sales tax or a subtotal)

- Automatically total the entries in a table column

This chapter is divided into two parts. The first part, "Basic Fill-in Rules," describes basic fill-in rules for text, amounts, and dates. This chapter is designed to provide you with the general concepts and practice necessary to create fill-in rules for fields.

When you complete Part 1, you should be able to

- Fill in a field with your name, the date, and the time of day

- Use addition, subtraction, multiplication, and division in fill-in rules

- Detect and recover from errors in fill-in rules

- Combine several arithmetic operations in fill-in rules

- Use advanced math operators in fill-in rules

- Use text in fill-in rules

- Work with dates in fill-in rules

- Use choice expressions

- Access information in fields contained in other documents or folders on the desktop

The second part, "Table Fill-in Rules," describes fill-in rules for tables. This chapter is designed to provide you with the general concepts and practice necessary to reference the rows, subrows, columns, and subcolumns of a table with fill-in rules.

When you complete Part II, you should be able to

- Specify table columns and subcolumns in fill-in rules

- Specify table rows and repeating rows in fill-in rules

- Specify alternate row pathnames in fill-in rules

Getting started

Before you begin this chapter, you should be familar with the chapter titled "Forms" in this self study guide. If you want to write fill-in rules using tables, you should also be familar with the chapter titled "Tables."

To complete this chapter, you need a 6085 Professional Computer System or an 8010 Information System with VP Document Editor software installed and running. To verify that this software package is installed and running, open the application loader, which is located in the workstation divider of the directory. If the software package is not displayed when you open the application loader, or if its status is set to idle, refer to the "Application Loader" chapter of the "Xerox ViewPoint" self study guide.

Parts I and II are divided into sections. Each section introduces a number of related concepts. When these concepts involve on-line practice, exercises are included. When necessary, you test your knowledge with a self check; at the end of your training, you review all the skills taught with a final progress check.

When a term that is new or unique is introduced, it is italicized and placed in boldface type. You can find a more detailed explanation of each term in the "Glossary" tab of the VP Series reference library.

To get started, you need the folder titled VP Fill-in Rules on the VP Training Exercises floppy disk. Within the folder are all the documents necessary to complete this self study guide.

For Part I, you will find the following types of documents in this folder:

- **F**ill-in **R**ule **PR**actice documents (for example, FR PR 2-1)

- **F**ill-in **R**ule **S**elf **C**heck documents (for example, FR SC 3-1)

- **F**ill-in **R**ule **P**rogress **C**heck documents (for example, FR PC 5-1)

For Part II, you will find the following types of documents:

- **T**able Fill-in **R**ule **PR**actice documents (for example, TR PR 2-1)

- **T**able Fill-in **R**ule **S**elf **C**heck documents (for example, TR SC 3-1)

- **T**able Fill-in **R**ule **P**rogress **C**heck documents (for example, TR PC 5-1)

At this point, you are ready to load the VP Training Exercises floppy disk onto your desktop. To review the procedure for loading a floppy disk, refer to the chapter titled "Floppy Utility" in the "Xerox ViewPoint" self study guide. The floppy disk drive is optional hardware for the 6085. If your system does not have a disk drive, you can obtain the training exercises over the network. See your System Administrator regarding where these files are located.

You can copy the VP Forms folder and rename it. This automatically allows you to work with a copy of the original documents and to store your completed practices.

Beginning with this introduction, continue through each section sequentially, at your own pace, until you have mastered the skills taught. Your training should take approximately 7-8 hours.

While you are completing this chapter, it is advisable that you have the tab titled "VP Document Editor" in the VP Series reference library available for easy referral.

Part I: Basic fill-in rules

1. Filling in fields

Overview

Automatic field fill-in is done by defining a *fill-in rule* for a field. The rule can tell the system to take information from one field and combine it with information from another field using addition, subtraction, multiplication, or division. The result is placed in the field for which the rule is defined.

In this section, you examine how fill-in rules work for form fill-in.

Filling in fields using <NEXT>

Whenever <NEXT> is pressed and the caret enters a field that has a fill-in rule, the rule is used to calculate the entry in that field and automatically fill it in.

In the following exercise, you study a form that already has some fill-in rules to see their effect.

1. **Open** practice document FR PR 1-1.

2. **Select** [EDIT] in the document header.

3. **Select** [GO TO FIRST FILL-IN] from the document auxiliary menu.

4. **Type:** N63J. (The caret is placed in the item number box.)

5. **Press** <NEXT>. (The caret moves to the item description field.)

6. **Type:** flannel shirt.

7. **Press** <NEXT>. (The caret moves to the quantity field.)

8. **Type**: 3.

9. **Press** <NEXT>. (The caret moves to the unit price field.)

10. **Type**: 12.95.

11. **Press** <NEXT>.

The Total Price field has an automatic fill-in rule that causes it to calculate the total price by multiplying the quantity times the unit price. When the calculation is complete, the Total Price field is filled in, and the caret appears in the next field that requires you to enter information (the Tax Rate field).

NOTE: The cursor takes on the shape of an hourglass when an automatic fill-in rule is being calculated. Once the calculation is complete, the cursor resumes its normal shape.

Filling in fields using [UPDATE FIELDS]

When [UPDATE FIELDS] is selected, all of the fields in a document with fill-in rules are automatically updated and filled in.

In the following exercise, you use [UPDATE FIELDS] to finish filling in your practice document.

1. **Type** into the tax rate field: .06.

2. **Select** [UPDATE FIELDS] from the document auxiliary menu.

   Notice that the tax field has been updated to $2.33, and the Total Charge field has been updated to $43.18. The total charge includes the price of the merchandise, the tax, and a $2.00 handling charge.

Viewing a field fill-in rule

The fill-in rule for a field can be viewed on the field property sheet. To view a field's fill-in rule, first make the field visible, then select the field and press <PROP'S>.

In the following exercise, you look at the fill-in rule for the Total Charge field near the bottom of the form.

1. Select [SHOW STRUCTURE] in the document auxiliary menu.

2. Select the field for Total Charge. To do this, point at one of the field symbols and click the left mouse button twice. The first click selects just one field symbol; the second selects both of them, plus any contents of the field. Do not use the right mouse button.

3. Press <PROPS>.

   You can see that the field's property sheet contains many options. At the bottom of the property sheet is a fill-in rule box. The text inside this box is the fill-in rule for the field. The rule is just what you would expect - the sum of the charges on the form:

   TotalPrice + TaxAmount + 2.00

4. Close the property sheet.

   Since the person who writes the rule has no idea what the numbers in each field will be when the form is filled in, *field names* are used when writing the rule. TotalPrice and TaxAmount are the names of the fields used in the calculation of the total charge. The numbers in these fields will most likely change each time the form is used. At the time of calculation, the numbers entered in each field are used in the calculation where their field names appear in the rule.

If a number never changes (like the $2.00 handling charge, which is added to all orders), it is called a constant. An actual number is used in the rule instead of a field name.

5. **Close** your practice document.

Summary

In this section, you studied how to:

● Use < NEXT > to fill in fields

● Use [UPDATE FIELDS] to fill in fields

● Use < PROP'S > to view a fill-in rule

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section.

2. Entering a field name into a rule

Overview

When the rule for one field uses the information typed into another field, it refers to that information by giving that other field's name in the rule.

The simplest situation occurs when one field needs to contain exactly the same information as a field that was filled in earlier. In this case, the second field can have a fill-in rule that gives only the name of the first field.

You have learned to view fill-in rules. In this section, you create your first fill-in rule by finding the name of a field and inserting that name into the fill-in rule for another field.

When you complete this section, you should be able to locate a field name, and create a simple fill-in rule.

Locating a field name

In order to write fill-in rules that refer to other fields, you first need to determine the name of the field you wish to refer to. To determine a field's name, select the field and press <PROP'S>. The field name appears at the top of the property sheet.

In the following exercise, you locate a field name.

1. **Open** practice document FR PR 2-1.

2. **Select** [SHOW STRUCTURE] in the document auxiliary menu.

All the fields and other structures in the form are now visible.

3. Select the second field in the form. (The field just before the words "and family" in the address area of the form letter.)

4. Press <PROP'S>.

The field's name, AddressLastName, appears at the top of the property sheet.

5. Select [CANCEL] to close the property sheet.

Entering a field name

In the following exercise, you give the field in the salutation of the letter a fill-in rule. Since the last name in the address field is the same as the one needed in the salutation, you will create a fill-in rule that instructs the salutation field to use the same information appearing in the address field.

1. Select [EDIT] in the document header.

2. Select the field in the salutation that begins: To the family.

3. Press <PROP'S>.

4. Place the caret inside the fill-in rule box.

5. Type: AddressLastName.

6. Select [DONE].

AddressLastName is the name of the field in the address area of the form letter. The fill-in rule tells the system to insert in this field whatever information is contained in the field named AddressLastName. Since the original field name did not contain any spaces, be sure you do not type any spaces now.

Verifying fill-in rules

After you have created a fill-in rule, you should test it to verify that the rule is correct. In this case, you want to make sure that whatever you type in the address field is automatically entered in the salutation field.

In the following exercise, you verify that your fill-in rule works.

1. **Place** the caret inside the field for the last name field in the address area. (The caret should go inside the field.)

2. **Type**: Clemens.

3. Select [UPDATE FIELDS] in the document auxiliary menu.

   If Clemens appears in the salutation field, your rule is correct. If nothing was placed in the salutation field, make sure you typed Clemens into the proper field in the address area (the second field).

   If your workstation detects a problem with the fill-in rule, the property sheet containing the rule automatically opens, with the incorrect part of the rule highlighted. A message about the error appears at the top of your screen. Check to make sure that the field name is typed in the fill-in rule exactly as shown above. Try again. If it still does not work correctly, go on to the next section. You will learn more about error correction in a later section.

   If you would like more practice, try to make a fill-in rule for the field inside the letter. This rule should also copy the last name from the address field. Be sure to test this rule also.

4. **Close** your practice document.

NOTE: When entering a field name in a fill-in rule, any spaces or punctuation characters you enter must be preceded by an apostrophe. Therefore, the field name Employee Last-Name must be given as Employee' Last'-Name in a fill-in rule.

Since the entry of apostrophes proves to be time-consuming, it is recommended that you use field names that do not contain spaces or punctuation. Capital letters can serve to distinguish words in the names, as is done in all of the examples in this chapter.

Summary

In this section, you studied how to:

● Use [PROP'S] to locate a field name

● Enter a field name

● Use <UPDATE FIELDS> to verify that a fill-in rule is correct

If you need more practice, complete the exercises again. To do this, use new copies of the practice documents for this section. Then delete your practice document.

3. Automatic fill-in for user, time and date

Overview

Fields can be set to display automatically your name, today's date, and the present time of day. There are fill-in rules for each of these.

When you complete this section, you should be able to create fill-in rules to automatically display your name, the time, and the date in a document.

Your name

There is a fill-in rule for automatically filling in a field with your name. This fill-in rule is CurrentUser. CurrentUser fills in a field with the user's name. (This is the name typed into the log-on option sheet.)

In the following exercise, you create a fill-in rule that will fill in your name.

1. **Open** practice document FR PR 3-1.

2. **Select** [EDIT] in the document header.

3. **Select** the Employee Name field at the top of the document.

4. **Press** <PROP'S>.

5. **Enter** the fill-in rule: CurrentUser. (This is written as one word.)

6. **Select** [DONE].

7. **Select** [UPDATE FIELDS] in the document auxiliary menu.

   The field is filled in with your name.

Today's date

There is a fill-in rule for automatically filling in a field with today's date. This fill-in rule is CurrentDate. The date can be displayed in either of two formats:

10/29/85   or

October 29, 1985

The format in which the date is displayed depends on the format specified in the format option in the field property sheet. If the format is specified as:

Month Day, Year

then the date is filled in as

October 29, 1985

If the format is specified as:

MM/DD/YY

or, if the format property is left blank,

then the date will be displayed as:

10/29/85

In the following exercise, you create a fill-in rule that fills in today's date.

1. **Select** the field after the word: Date.

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule: CurrentDate. (This is written as one word.)

4. **Select** [DONE].

5. **Select** [UPDATE FIELDS] in the document auxiliary menu. The field is filled in with today's date.

Time

There is also a fill-in rule for automatically filling in a field with the present time. This fill-in rule is CurrentTime. The time is displayed in the following format:

1:47 pm

In the following exercise, you enter a fill-in rule that fills in the time.

1. **Select** the field after the word: Time.

2. **Press <PROP'S>.**

3. **Enter** the fill-in rule: CurrentTime. (Again, CurrentTime is one word.)

4. **Select [DONE].**

5. **Select [UPDATE FIELDS]** in the document auxiliary menu. The field is filled in with the present time.

Summary

In this section, you studied how to:

● Use CurrentUser to automatically fill in your name

● Use CurrentDate to automatically fill in the date

● Use CurrentTime to automatically fill in the time

If you need more practice, complete the exercises again.

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4. Using simple arithmetic

Overview

You can use addition, subtraction, multiplication, and division in fill-in rules. The symbols you use are:

+   (for addition)

-    (for subtraction)

*   (for multiplication - Do not use the letter "x".)

/   (for division)

Using fill-in rules, you can set up a form so that subtotals and other calculations are done automatically by the system. Here are some examples of field fill-in rules that might be used in your practice document.

● AirFare + Hotel
  adds the airfare and hotel costs

● Subtotal - CashAdvance
  subtracts the cash advanced from the subtotal that the employee must be reimbursed

● Miles * MileageRate
  multiplies the number of miles driven by the mileage rate

● MealsCosts / 2
  divides meal costs in half

When you complete this section, you should be able to create fill-in rules using addition, multiplication, and division.

Creating a fill-in rule using addition

In the following exercise, you create a fill-in rule using addition. The fill-in rule adds the airfare and hotel costs.

1. **Open** the property sheet for the Subtotal field.

2. **Select** inside the fill-in rule box at the bottom of the property sheet.

3. **Type**: Airfare + Hotel.

4. **Select** [DONE].

You have created a fill-in rule for the Subtotal field.

Verifying that the rule works:

5. **Place** the caret inside the Airfare field.

6. **Type**: 145.19

7. **Press** <NEXT>.

8. **Type**: 100.

   This amount is entered into the Hotel field.

9. **Press** <NEXT>.

   The Subtotal field is filled in with the amount 245.19. This is the sum of the airfare and hotel expenses.

Now that you are familiar with field names and fill-in rules, you will have an opportunity to practice what you have learned. The next two exercises use multiplication and division in fill-in rules.

Creating a fill-in rule using multiplication

In the following exercise, you create a fill-in rule using multiplication. The fill-in rule multiplies the number of miles driven by the reimbursement per mile. This gives the reimbursement for driving costs.

1. **Open** the property sheet for the driving reimbursement field. (This is the field after the words: per mile.)

2. **Select** inside the fill-in rule box.

3. **Type:** Miles*MileageRate.

4. **Select** [DONE].

Verifying that the rule works:

5. **Place** the caret inside the MilesDriven field.

6. **Type:** 100.

7. **Press** <NEXT>.

8. **Type:** .12.

9. **Press** <NEXT>.

The driving reimbursement field should be automatically filled in with the amount $12. This is the total reimbursement for driving 100 miles at 12¢ per mile.

Creating a fill-in rule using division

To make a fill-in rule that divides two values, you use a slash (/) for a division sign; for example: 6/3.

In the following exercise, you create a fill-in rule to calculate half of the meal cost on the expense report.

1. **Find out** the name of the Meals field at the left of the Meals line.

a. **Select** the field after the word: Meals.

b. **Press** <PROP'S>.

   The name of the field is at the top of the property sheet. Remember this name. You will be using it in a fill-in rule.

c. **Close** the property sheet.

2. **Select** the field at the right of the Meals line (after the words: Half is reimbursable.).

3. **Press** <PROP'S>.

4. **Select** inside the fill-in rule box.

5. **Type** the field name you found in step 1 into the fill-in rule box.

6. **Type:** /2

   Type this right after the field name you just entered.

7. **Select** [DONE].

8. **Place** the caret inside the field after the word Meals.

9. **Type:** 55.0.

10. **Press** <NEXT>.

The correct fill-in rule is MealCosts/2. The correct answer for the reimbursable meal amount in this case is $27.50. If you did not get the correct result, go back and review the steps once more.

Summary

In this section, you studied how to create fill-in rules using addition, multiplication and division.

If you need more practice, complete the exercises again.

5.   Errors in fill-in rules

Overview

There are three types of errors that you may find in field fill-in rules. This section discusses each type of error and how to correct it.

When you complete this section, you should be able to recognize errors detected by the system when it looks at the rule and when it attempts to use the rule. Additionally, you should be able to locate errors the system cannot detect.

Errors detected by looking at the rule

After you enter a fill-in rule and select [DONE] on the property sheet, the system checks the fill-in rule. If the system cannot understand the fill-in rule, the property sheet does not close. Instead, the system highlights the portion of the rule in error, and a message appears at the top of the screen.

In the following exercise, you enter an incorrect fill-in rule to see how the system reacts. You then correct the error.

1. Open the property sheet for the Subtotal field.

2. Select the + in the fill-in rule.

3. Type: [.

4. Select [DONE].

   The property sheet is still open, with [highlighted. An error message is displayed telling you that there is a problem with your fill-in rule.

Correcting the rule:

5. Press <DELETE> to delete the selected [.

6. Select [DONE].

   The system accepts the fill-in rule, and the property sheet closes.

Errors detected when trying to use the rule

Some errors are not noticed until the system attempts to use the rule. For example, if you refer to a field name that does not exist, or you attempt to do something that does not make sense mathematically (such as dividing by zero), the property sheet that contains the rule opens. The portion of the fill-in rule that caused the error is highlighted. The message at the top of the screen will aid you in recognizing what the problem might be.

In the following exercise, you make a fill-in rule incorrect again. Notice how the system reacts, and then correct the error.

1. Open the property sheet for the Subtotal Field.

2. Delete the letter "l" from the end of Hotel in the fill-in rule.

3. Select [DONE].

4. Place the caret inside the Subtotal field.

5. Press <NEXT>.

   The property sheet opens by itself and the field name Hote is highlighted in the fill-in rule. The message at the top of the screen is: Can't find the named item. This means that the system was unable to find a field named Hote.

Correcting the rule:

6. Type: l.

7. Select [DONE].

8. **Place** the caret inside the Subtotal field.

9. **Press** <NEXT>.

   The caret moves to the next field, as no errors were found.

Errors your workstation can not detect

This type of error is the most troublesome, because the system cannot detect it. You may create a fill-in rule the system will use without any problem, but this does not guarantee that the fill-in rule is correct.

For example, the fill-in rule for Subtotal adds the airfare and hotel bills together. The fill-in rule looks like this: Airfare + Hotel. Yet what if you had accidentlly typed Airfare + Airfare for the fill-in rule?

In the following exercise, you enter an error your workstation cannot detect.

1. **Open** the property sheet for the Subtotal field.

2. **Change** the fill-in rule to read: Airfare + Airfare.

3. **Select** [DONE].

4. **Place** the caret inside the Subtotal field.

5. **Press** <NEXT>.

   The Subtotal field is filled in with the amount 290.38.

   This time no property sheet opened to tell you there was an error. You must look carefully at the result to decide if it is correct or not. In this case, you might notice that the subtotal seems larger than it should be, which is the clue that starts your investigation into the error.

Correcting the rule:

1. **Open** the property sheet for the Subtotal field.

2. **Change** the fill-in rule to read: Airfare + Hotel.

3. **Select** [DONE].

The best way to help you discover this kind of error is to try several different data values in your form and check the results by using a calculator. Make these values as different as possible by using typical values that are common for such a form, unusually large values, and 0. If there are any values that might be treated specially (for example, when someone's billing charge is the same as his or her credit limit), try those values along with values slightly higher and lower.

You should be careful that your rules are correct, because other people who use the form may not double-check the values that are automatically filled in.

In the following exerrcise, you test your fill-in rule.

1. **Place** the caret inside the Subtotal field.

2. **Press** <NEXT>.

The field should be filled in with the correct result of 245.19.

Summary

In this section, you studied how to:

● Recognize errors detected by the system when it looks at a programming fill-in rule

● Recognize errors detected by the system when it attempts to use a programming fill-in rule

● Locate errors the system cannot detect

If you need more practice, complete the exercises again.

6. Using several arithmetic operations in a rule

Overview

In section 4, you used simple arithmetic in fill-in rules. In this section, you use several arithmetic operations in one field fill-in rule.

When you complete this section, you should be able to use like arithmetic operations as well as mixed arithmetic operations in a fill-in rule.

Using like arithmetic operations

Addition and subtraction represents one group of similar operations. Multiplication and division represents another group of similar operations. Fill-in rules that use operations from both groups are said to have mixed arithmetic operations.

To combine similar arithmetic operations in a field fill-in rule, type the field names, separated by the mathematical symbols. For example,

Driving + Hotel + Airfare + Meals

adds the four fields together.

In the following exercise, you create a rule for the Total field that adds the four expense fields.

1. **Select** the field after the word: Total.

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule: Driving + Hotel + Airfare + Meals.

4. **Select** [DONE].

5. **Place** the caret in the Total field.

6. **Press** < NEXT >.

The field is updated with the value $284.69.

Using mixed arithmetic operations

When several arithmetic operations are present in a rule, the calculation is usually performed from left to right. For example, if you have created a rule that reads:

TotalCashSpent + DrivingReimbursement -
CashAdvanced

the system first performs the addition on the left of the fill-in rule:

TotalCashSpent + DrivingReimbursement

It then continues to the right of the rule and subtracts the value in the CashAdvanced field to give the correct answer.

However, this principle holds true only when the operations are similar. When operations are different, (addition and multiplication, for example), mathematics has certain rules for deciding which operation to perform first. Multiplication and division are performed before addition and subtraction.

Usually this order of calculation is exactly what is needed. For instance, in the expression:

Quantity1*Price1 + Quantity2*Price2

both multiplications are automatically performed before the addition.

This order of evaluating the operations is not always appropriate, however. If you need to change the order in which operations are performed, enclose the expression to be performed first in parentheses. In fact, use parentheses if you have any doubt about the order in which the arithmetic is done. Using parentheses guarantee that a rule works the way you want it to.

In the following exercise, you create a fill-in rule for the field after Remainder Due Employee (Cash).

1. **Select** the field after Remainder Due Employee (Cash).

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule:
   (Total - CashAdvance) * 20%

4. **Select** [DONE].

   NOTE: The parentheses around the expression Total - CashAdvance causes the system to do the subtraction before the multiplication. If the fill-in rule had been written without the parentheses, the rule would be incorrect.

5. **Place** the caret in the Cash Advance field.

6. **Enter:** 50.

7. **Press** <NEXT>.

   The Remainder Due Employee (Cash) is filled in with the amount $46.94.

8. **Close** your practice document.

Summary

In this section, you studied how to:

- Use like arithmetic operations in a fill-in rule
- Use mixed arithmetic operations in a fill-in rule

If you need more practice, complete the exercises again. Then delete your practice document.

7.   Self check

The following exercise contains a form letter. You are going to create fill-in rules for some of the fields in the form. If you run into any problems, consult the answer list following the exercise.

1. **Open** practice document FR SC 7-1.

2. **Select** [EDIT] in the document window.

3. **Create** the following fill-in rules:

   a. **Total price field.** Set this field so the quantity, multiplied by the unit price, equals the total price.

   b. **Tax field.** Set this field so a 6 percent tax rate is calculated for the total price.

   c. **Total Charge field.** Set this field so the total price plus the tax equals the total charge.

   d. **Field following the words: billing your charge account for.** Set this field to equal the total charge.

4. **Verify** that the form is correct by testing it.

   a. **Select** inside the Quantity field.

   b. **Type:** 5.

   c. **Press** < NEXT >.

   The caret moves to the UnitPrice field.

   d. **Type:** 21.00

   e. **Select** [UPDATE FIELDS] in the document auxiliary menu.

The remaining fields in the document should be auto-matically filled in. Figure 7-1 shows what your document should look like.

Stadtmiller Office Supplies
5 Marchand Way
Upper Arlington, Ohio 43119

Order Date: ᒥ⅃

ᒥDr.⅃ᒥDavid⅃ᒥBrooks⅃
ᒥ28 Rose Street⅃
ᒥCleveland⅃, ᒥOh⅃ ᒥ00009⅃

Dear ᒥ⅃:
We have received your order for ᒥ⅃. We have the stock on hand to fill your order, so it will be shipped as soon as possible.

The total price of your merchandise will be the quantity, ᒥ5⅃ times the unit price of $ᒥ21.00⅃, which comes to $ᒥ105.00⅃. The tax, which is ᒥ.06⅃, comes to $ᒥ 6.30⅃. The total charge will be $ᒥ111.30⅃.

Your order will take ᒥ⅃ shipping days. The arrival date for this order is ᒥ⅃ . Your billing date is ᒥ⅃ which is ᒥ⅃ days after the arrival date.

Thank you very much for your order. We will be billing your charge account for $ᒥ***111.30⅃.

Sincerely,

Chris Huang

Figure 7-1 **Sample document**

The fields should be filled with the values:

Total price	=	$105.00
Tax	=	$ 6.30
Total charge	=	$111.30
Charge account bill	=	$111.30

Answers to self check

1. **Set the total price field:**

    Find out the names of the fields to be used in this rule by looking at their property sheets. (The names are Quantity and UnitPrice.)

    Select the total price field.

    Press <PROP'S>.

    Select inside the box for the fill-in rule.

    Type: Quantity*UnitPrice.

    Select [DONE].

    Select inside the Quantity field.

    Type: 5.

    Press <NEXT>.

    Type: 21.00.

    Press <NEXT>.

    Verify that the total price field is $105.00.

2. **Set the tax field:**

    Find out the name of the field to be used in this rule by looking at its property sheet. (The name is TotalPrice.)

    Select the tax field.

    Press <PROP'S>.

    Select inside the box for the fill-in rule.

    Type: TotalPrice * .06.

    Select [DONE].

    Select inside the TotalPrice field.

    Press <NEXT>.

    Verify that the tax field is $6.30.

3. **Set the total charge field:**

    Find out the names of the fields to be used in this rule by looking at their property sheets. (The names are TotalPrice and Tax.)

    Select the total charge field.

    Press <PROP'S>.

    Select inside the box for the fill-in rule.

    Type : TotalPrice + Tax.

    Select [DONE].

    Select inside the tax field.

    Press <NEXT>.

    Verify that the total charge field is $111.30.

4. **Insert the total charge amount after the words "charge account for":**

    Find out the name of the field to be used in this rule by looking at its property sheet. (The name is TotalCharge.)

    Select the field following the words: charge account for.

    Press <PROP'S>.

    Select inside the box for the fill-in rule.

    Type: TotalCharge.

    Select [DONE].

    Select inside the Total Charge field.

    Press <NEXT>.

    Verify that the last field is ***111.30.

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8. Introduction to advanced mathematical operations

Overview

You have already learned how to do addition, subtraction, multiplication, and division with fields. This section introduces you to more advanced mathematical operations such as square root, standard deviation, and modulo. It is beyond the scope of this chapter to explain what these operations are and how they are used. The advanced mathematical operators available for fields are listed below. For further details, consult the VP Series reference library.

Percent

The percent operator is the percent symbol (%). This operation is used to divide a number by 100.

For example: the fill-in rule:

50%*Field1

would calculate 50% of the value in Field1.

Negative sign

The negative sign operator is the minus sign (-). It is used to change the sign of a number. For example:

   -Field

would result in the negative value of Field1.

Exponent

The exponential operator is used to calculate the power of a number. For example:

Exp[2,3]

would raise 2 to the 3rd power, which is 8.

Sum

The sum operator is used to add a list of numbers. For example:

SUM[CarPayment, Rent, Groceries]

is equivalent to:

CarPayment + Rent + Groceries.

Summary

The other operators available are:

- Square
- Square root
- Product (of a list of numbers)
- Mean (of a list of numbers)
- Standard deviation (of a list of numbers)
- Minimum (of a list of numbers)
- Maximum (of a list of numbers)
- Modulo

Refer to the sub-tab titled "Fill-in Rules" in the VP Series reference library for more details on how to use these operators.

9. Using text operators

Overview

This section describes the available text operators, which are used to manipulate text. Text operators produce text. Therefore, fields containing fill-in rules that use text operators should be of type text.

When you complete this section, you should be able to append two text fields.

Adding text together

In an earlier section, you learned how to combine numbers in a fill-in rule. Now you will learn how to combine two or more pieces of text together in a fill-in rule.

The operator used for appending text together is called the *concatenation operator*. Concatenation means linking together in a series. The concatenation operator is represented by an ampersand symbol (&).

1. **Open** practice document FR SC 7-1 (if is not currently open).

In your practice document, there are three fields at the top of the document. The salutation field of the document is empty. It should contain "Dr. Brooks." The first field in the form contains "Dr.," while the second field contains "Brooks." You can write a fill-in rule to combine these two fields together to fill in the salutation.

The name of the first field is Title, while the name of the second field is LastName. The fill-in rule for combining the title and last name would be Title & LastName.

In the following exercise, you add text.

1. Select the field after the word: Dear.

2. Press <PROP'S>.

3. Enter the fill-in rule: Title & LastName

4. Select [DONE].

5. Place the caret inside the salutation field.

6. Press <NEXT>.

   The field is filled in with "Dr.Brooks," but there is no space between "Dr." and "Brooks."

The above fill-in rule to enter the space is: Title & "" & LastName. This fill-in rule introduces a text constant. A text constant is text in a fill-in rule that never changes. Text constants begin with quotes and end with quotes. The text to be used in the fill-in rule is between the set of quotes.

The fill-in rule has the text constant: " ". This text constant consists of a single space between the beginning and ending quotes. Of course, text constants can have more than one character or word. For example, both of the following:

"Brown"

"Jack and company"

are text constants.

In the following exercise, you fix your fill-in rule.

1. Select the salutation field again.

2. Press <PROP'S>.

3. Change the fill-in rule to read: Title & " " & LastName

4. Select [DONE].

5. **Place** the caret inside the salutation field.

6. **Press** <NEXT>.

   The field is now filled in with "Dr. Brooks" (with a space separating the two words).

Other text operators

Two other text operators are minimum (MIN) and maximum (MAX). The minimum operator takes a list of several text items and decides which item is first in alphabetical order.

For example, the fill-in rule:

MIN["Tom","Dick","Harry"]

would display the name "Dick," since "Dick" comes before "Tom" or "Harry" alphabetically.

For more details on using minimum and maximum, consult your reference guide.

Summary

In this section, you have learned to append two text fields. If you need more practice, complete the exercise again.

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10.   Working with dates

Overview

In a field that contains a date, some calculations using that date are possible. You can subtract two dates in a field, add a number to a date, or subtract a number from a date.

When you complete this section, you should be able to add a number to a date and subtract one date from another.

Working with dates

You may want to tell a customer that his or her order will be filled a certain number of days after the order is received. You want the date the order was placed added to the number of days it will take to fill the order. This can be achieved by creating a fill-in rule that adds the date and a number together:

OrderDate + ShippingDays.

The system knows the number of days in every month and takes leap years into account, so the calculation of a date will always be correct.

In the following exercise, you create a fill-in rule for the ArrivalDate field that adds the date of the customer order to the number of days it will take to fill the order.

1. **Display** the property sheet for the ArrivalDate field.

2. **Enter** the fill-in rule: OrderDate + ShippingDays.

3. **Select** [DONE].

Verifying that your rule works:

4. Select in the OrderDate field at the top of the form.

5. **Type**: February 20, 1986.

6. Select in the ShippingDays field.

7. **Type**: 15.

8. **Press < NEXT>.**

    The ArrivalDate field should read March 7, 1986.

To create a fill-in rule that subtracts one date from another, type the subtraction symbol between the two field names. For example:

BillingDate - ArrivalDate

In the following exercise, you create a fill-in rule for subtracting dates.

1. **Display** the property sheet for the field after the words: which is.

2. Enter the fill-in rule: BillingDate - ArrivalDate.

3. Select [DONE].

Verifying that your rule works:

4. Select in the BillingDate field.

5. **Type**: April 1, 1986.

6. **Press < NEXT>.**

    The billing date is 25 days after the arrival date.

Summary

In this section, you studied how to:

1. Add a number to a date

2. Subtract two dates

If you need more practice, complete the exercises again.

11. Creating choices

Overview

There are times when simple arithmetic expressions are not capable of expressing the calculations needed in a rule. The fill-in rule package contains a feature for making comparisons among operators.

When you complete this section, you should be able to use the choice expression and use the logical OR and AND operators with the choice expression.

Using the choice expression

You may need to write a rule that calculates sales tax according to the state in which a customer lives. If the state is California, you must add a sales tax of 6.5 percent; otherwise, you calculate a different amount. It is not possible to express such a concept with the arithmetic expressions introduced earlier because a choice has to be made among different expressions.

The expression needed to make this choice is:

```
CHOOSE
    State = "CA" -> Total*6.5%;
    OTHERWISE -> Total*7%
```

The choice expression starts with the word CHOOSE. The word CHOOSE indicates to the system that a choice expression must be evaluated. Each line that follows CHOOSE represents a choice and consists of two parts. The first part gives a comparison, usually comparing a field with a value. They are separated by a relational expression, such as the equal sign. (For example, the first item in the above example compares the field named State with the letters CA.

The second part of the line names a fill-in rule and is separated from the first part by an arrow symbol, -> (a minus sign followed by a greater-than sign. There are no spaces between the two symbols.)

The first choice in the choice expression:

State = "CA" -> Total*6.5%

is read as:

> If the field named State is filled in with the abbreviation CA, then use the fill-in rule: Total*6.5%

NOTE: The expression that follows the arrow can be any expression that can be entered into a fill-in rule. Notice that the choice is ended with a semicolon. Always end each choice with a semicolon.

The choice expression is provided to allow the software to choose among several different expressions. For example, you might want to calculate a sales tax according to the following rules:

1. If the customer lives in California, then the sales tax is 6.5%.

2. If the customer lives in Wisconsin, then the sales tax is 4%.

3. If the customer does not live in California or Wisconsin, then the sales tax is 7%.

A choice expression that meets the above rules looks like this:

CHOOSE
    State = "CA" -> Total*6.5%;
    State = "WI" -> Total*4%;
    OTHERWISE -> Total*7%

The second choice in the CHOOSE expression is:

State = "WI" -> Total*4%;

This choice is read as:

> If the field named State is filled in with the abbreviation WI, then use the fill-in rule: Total*4%.

The third and final choice begins with the word OTHERWISE. OTHERWISE is used to take care of the situation in which none of the previous choices were used. Choice expressions always end with OTHERWISE.

The OTHERWISE choice in the CHOOSE expression is:

> OTHERWISE -> Total*7%

This choice reads:

> If the customer is not living in California or Wisconsin, then use the fill-in rule:
>
> Total*7%

NOTE: OTHERWISE does not end with a semicolon, as the other choices do.

There can be as many choices as are needed, as long as there is a semicolon after each choice.

In the following exercise, you use a choice expression in your practice document for the tax rate field. The tax rate depends on the state in which the customer lives. Use the following rules:

- In Ohio, the tax rate is 4%.

- In Michigan, the tax rate is 6%.

- In Indiana, the tax rate is 4.5%.

- Otherwise, the tax rate is 5%.

1. Select the tax rate field in your document. (This is the field after the words: The tax, which is.)

2. **Press <PROP'S>.**

3. **Change** the fill-in rule to:

    CHOOSE
        State = "Oh" -> 4%;
        State = "Mich" -> 6%;
        State = "Ind" -> 4.5%;
        OTHERWISE -> 5%

4. **Select** [DONE].

Testing your fill-in rule:

5. **Select** inside the tax rate field.

6. **Press** <NEXT>.

    The tax rate field is updated to 4% (.04), since the customer is living in Ohio.

Testing your Choice expression for other states:

7. **Change** the State field in the address area of your document to read: Mich.

8. **Place** the caret inside the tax rate field.

9. **Press** <NEXT>.

    The tax rate is updated to 6% (.06).

Comparisons

In the choice expression for the tax rate field, you used the equal sign (=) to compare the State field against various choices. For example, the choice:

    State = "Oh" -> 4%;

compares the contents of the State field with the text constant "Oh."

You can use the equal sign to compare two fields, two constants, or a field with a constant. For example,

State 1 = State 2

compares two fields together, while

State = "Ohio"

compares a field with a text constant.

There are other symbols besides the equal sign which can be used to compare fields and constants.

Other possible expressions are:

- Balance #0   This compares the field named Balance against 0. It reads: If the balance is not equal to 0

- Balance >50   If the balance is greater than 50 dollars

- Balance <50   If the balance is less than 50 dollars

- Balance < = 50   If the balance is less than or equal to 50 dollars.   (The symbol < = is actually made from the symbols < and =. Do not type a space between these two symbols.)

- Balance > = 50   If the balance is greater than or equal to 50 dollars

The following is an example of a choice expression that uses the < symbol. The fill-in rule for a Balance Due field of a tax statement could be:

CHOOSE
    TaxPaid<TaxOwed->TaxOwed-TaxPaid;
    OTHERWISE->0

This reads:

If you paid less tax than you owe, then enter the difference. Otherwise, enter 0.

Logical operators

There are three logical operators that can be used in choice expressions. These operators are OR, AND, and NOT.

Using the OR operator

In your practice document, you entered the following choice expression:

```
CHOOSE
    State = "Oh"-> 4%;
    State = "Mich" -> 6%;
    State = "Ind" -> 4.5%;
    OTHERWISE -> 5%
```

Suppose someone filling out your form for a customer living in Ohio entered Ohio instead of Oh. What would happen?

In the following example, you enter the wrong information.

1. Change the contents of the State field to the word: Ohio.

2. Place the caret inside the tax rate field.

3. Press <NEXT>.

The tax rate reads 5%, but the correct tax rate for Ohio is 4%. Since the State field is filled in with Ohio instead of Oh, OTHERWISE was chosen, yielding 5%.

You could rewrite the choice expression to read:

```
CHOOSE
    State = "Oh" -> 4%;
    State = "Ohio" -> 4%;
    State = "Mich" -> 6%;
    State = "Ind" -> 4.5%;
    OTHERWISE -> 5%
```

Or the expression could be rewritten as:

```
CHOOSE
    State = "Oh" OR State = "Ohio" -> 4%;
    State = "Mich" -> 6%;
    State = "Ind" -> 4.5%;
    OTHERWISE -> 5%
```

In this new choice expression, two choices have been combined into one.

The choice:

```
    State = "Oh" OR State = "Ohio" -> 4%;
```
is read as:

> If the field named State is filled in with the letters Oh or the word Ohio, then the tax rate is 4%.

The word OR is used to combine two comparisons. If either comparison is true, that choice is used.

In the following example, you create a fill-in rule using the OR operator.

1. **Select** the tax rate field in your document.

2. **Press** <PROP'S>.

3. **Change** the fill-in rule to:

```
CHOOSE
    State = "Oh" OR State = "Ohio" -> 4%;
    State =     "Mich" OR State = "Michigan" ->
                6%;
    State = "Ind" OR State = "Indiana" -> 4.5%;
    OTHERWISE -> 5%
```

4. **Select** [DONE].

Testing your fill-in rule:

5. **Place** the caret in the tax rate field.

6. **Press** <NEXT>.

> The tax rate field is corrected to the value of 4%.

7. **Close** your practice document.

Using the AND operator

Another operator that can be used to combine two comparisons is the AND operator. Like OR, the AND operator also combines two comparisons. However, both comparisons must be true for the choice following the two comparisons to be chosen.

For example, the expression below chooses an employee's mail station depending on the employee's building and floor number:

```
CHOOSE
    Bldg = "Bldg 1" AND Floor = 1 -> "A1-01";
    Bldg = "Bldg 1" AND Floor = 2 -> "A1-02";
    Bldg = "Bldg 2" -> "A2-01";
    OTHERWISE -> ""
```

The first choice in this expression is:

Bldg = "Bldg 1" AND Floor = 1 -> "A1-01";

which is read as:

If the employee is working in building 1 and he/she is working on the first floor, then the mail station is A1-01.

Using the NOT operator

The third operator is the NOT operator. This operator negates the comparison after it. For example, the choice:

NOT City = "Los Angeles" -> "A1-12";

is read as:

If the employee is not working in Los Angeles, then the mail station is A1-12

NOTE: Like arithmetic operators, several logical operators can be combined together in one choice of a CHOOSE expression. For further information on how to use operators in fill-in rules, refer to the sub-tab titled "Fill-in Rules" in the VP Series reference library.

Summary

In this section, you studied how to:

● Use the choice expression

● Use the logical OR operator with the choice expression

If you need more practice, complete the exercises again. Then delete your practice document.

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12. Accessing fields in other documents

Overview

So far, you have learned how to take information from one or more fields and place the result in another field. Yet all of these fields had to be in the same document. In this section, you will learn how fields in one document can be filled in with information from fields in another document.

Accessing remote data is useful because it allows you to access information without having to open another document, search for the information inside, and manually copy the information.

When you complete this section, you should be able to access data in another document, access data that is contained in a document within a folder, use the subtraction operator with remote data, and access remote data using the IN THE Document WHOSE NAME IS expression.

Accessing data in another document

Data can be accessed from another document as long as that document is on your local desktop or inside a folder on your local desktop. Data in a document or a folder in a file drawer cannot be accessed directly. The document or folder must be copied to your desktop before its data can be accessed.

1. **Copy** practice document Report86 to your desktop.

2. **Copy** practice folder PreviousReports to your desktop.

3. **Open** practice document FR PR 12-1.

4. **Select** [EDIT] in the document header.

5. **Select** the first field in the letter.

6. **Press** <PROP'S>.

Referencing the field Profits in the document Report86:

7. **Enter** the fill-in rule:
   Report86:Profits

8. **Select** [DONE].

9. **Place** the caret inside the field.

10. **Press** <NEXT>.

The field automatically is filled in with the value in the field named Profits in the document titled Report86. (The value is $47,000,000.)

NOTE: If an icon name has a space in it, then an apostrophe must precede the space for the name to be recognized. For example, the icon name Report 86 must be written Report' 86 in a fill-in rule.

Accessing data in a folder

Data in a document which is in a folder can also be accessed by fill-in rules. The folder PreviousReports, on your desktop contains a document titled Report85. Inside this document is a field called Profits which contains the company's profits for 1985.

In the following exercise, you access this data in your practice document.

1. **Select** the second field in the document.

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule:
   PreviousReports:Report85:Profits

4. **Select** [DONE].

5. **Place** the caret inside the field.

6. **Press** <NEXT>.

The field is automatically filled in with the value of $37,000,000. You have now accessed data in another document in a folder.

If the PreviousReports folder had not been directly on your desktop, but inside another folder titled Widget Corp., then the fill-in rule would have been:

WidgetCorp:PreviousReports:Report85:Profits

Notice that the fill-in rules ends with the field name, which is preceded by the document name, the folder containing the document (the inner folder), and the folder that contains the inner folder.

Using remote data with operators

Fields that exist in other documents can be used in any of the fill-in rules discussed in the previous sections. For example, you can add, subtract, multiply, or divide two fields that are in another document.

In the following exercise, you find the difference in profits for 1986 and 1985 by creating a fill-in rule.

1. **Select** the last field in the document.

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule:

   (Report86:Profits) - (PreviousReports:Report85:
   Profits)

   NOTE: Each reference to a field in another document must be in parentheses.

4. Select [Done].

5. Place the caret inside the last field in the document.

6. Press <NEXT>.

The last field should be filled in with the difference in profits for 1986 and 1985, which is $10,000,000.

Alternate form for accessing remote data

There is a second way to write an expression accessing data in another document. This second way takes longer to write but is easier to read. The format is:

Field Name IN THE Document WHOSE NAME IS "DocumentName"

For example, the fill-in rule

Report86:Profits

could be rewritten as:

Profits IN THE Document WHOSE NAME IS "Report86"

The fill-in rule

PreviousReports:Report85:Profits

could be rewritten as:

Profits IN THE Document WHOSE NAME IS "Report85" IN THE Folder WHOSE NAME IS "PreviousReports."

In the following exercise, you change the first fill-in rule in your document.

1. Select the first field.

2. Press <PROP'S>.

3. Change the fill-in rule to:

Profits IN THE Document WHOSE NAME IS "Report86"

4. **Select** [DONE].

5. **Place** the caret inside the first field.

6. **Press** <NEXT>.

The value in the field should not change.

7. **Close** your practice document.

Summary

In this section, you have studied how to:

● Access fields in another document

● Access fields in a document that is contained in a folder

● Combine fields in another document with the subtraction operator

If you need more practice, complete the exercises again. Then delete your practice document.

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13. Progress check

In Part I, you created fill-in rules for fields. To check your understanding, complete each of the following tasks. They represent a summary of what has been taught in the previous sections.

You should be able to complete these tasks in 10 to 20 minutes without any errors. If you find this difficult, review the previous sections and try the exercise again.

1. **Open** practice document FR PC 13-1.

   There are several fields in this form. You are going to create fill-in rules for several of the fields as instructed below. The fields have already been named for you. You will need to open the field property sheets to get the field names for use in the fill-in rules.

2. **Write** a fill-in rule so that the field at the top of the letter will be filled in with the date the form is filled in .

3. **Write** a rule to copy the contents of the date field at the top of the letter into the last field in the first paragraph.

4. **Write** a choice expression for the total room charge. This cost depends on which inn the customer is staying at, and the total cost. Village Inn 1 room rate is $40.00 per night. Village Inn 2 room rate is $48.00 per night.

5. **Write** a fill-in rule to calculate the total charge. This includes the total room cost plus 6% sales tax.

6. **Write** a fill-in rule to calculate the deposit. The deposit is 25% of the total charge.

7. **Set** the last field to be two weeks prior to the date of occupancy.

8. **Test** your form letter by filling it in as follows:

Place the caret in the Salutation field.

Type: Mr. Chuckles.

Press <NEXT>.

Type: 1.

Press <NEXT>.

Type: June 30, 1986.

Press <NEXT>.

Type: 3.

Select [UPDATE FIELDS] in the document auxiliary menu.

Answers to progress check

The field contents in your form should match those in Figure 13-1. The numbers in parenthesis indicate the sections in which you will find details on each procedure.

Village Inns
R. R. 5
New Brighton, NH 03115

⌜May 3, 1985⌟

Dear ⌜Mr. Chuckles⌟,

Thank you for your reservation for a room in Village Inn ⌜1⌟, starting the evening of ⌜June 30, 1986⌟ and running for ⌜3⌟ nights. Your reservation was received on ⌜5/3/85⌟; rooms are indeed available as of this date.

The charge for a room in that building will be $⌜120.00⌟. With tax, your total charge is $⌜127.20⌟. A 25% deposit of $⌜31.80⌟ is due by ⌜June 16, 1986⌟.

We look forward to your visit, and hope we can be of service to you in the future.

Sincerely,
Lee Cunningham
Manager

Figure 13-1 **Completed form**

You should have used the following fill-in rules.

1. **For the date at the top of the page: (3)**

    CURRENTDATE

2. **For the second date: (2)**

    LetterDate

    NOTE: CURRENTDATE is also an acceptable answer.

3. **For the total room cost: (11)**

    CHOOSE
    VillageInn = 1 -> 40*NumNights;
    OTHERWISE -> 48*NumNights

4. **For the total charge: (6)**

    RoomCharge + (RoomCharge*6%)

5. **For the deposit: (4)**

    TotalCharge*25%

6. **For the deposit due date: (10)**

    StartDate - 14

After completing this exercise, close and delete your practice document.

Part II: Table fill-in rules

1.　　　　Filling in tables

Overview

Each column in a table can have its own fill-in rule. The entries in a column can be automatically filled in with information from another column in the same table, information from another table, or information from fields. Fields can also be filled in with information from tables.

When you complete this section, you should be able to update a table for which fill-in rules have been written.

Updating a table

Figure 1-1 shows an order form listing several items, the quantities of each item purchased, and the sales price. A fill-in rule can be given to the Total column so that each entry in the column will be the appropriate quantity times the price.

Item	Quantity	Price ($)	Total
Bolt	10	1	
Nut	10	2	
Widget	5	2	
Dohickey	10	5	

TOTAL　　$Γ⅃

Figure 1-1 Order form

In the following exercise, you open the practice document containing this table to see fill-in rules for tables in action.

1. **Open** practice document TR PR 1-1.

2. **Select** [EDIT] in the document header.

3. **Select** [UPDATE FIELDS] in the document auxiliary menu.

Notice that the entries in the Total column of the table have been filled in. The field below the table has also been filled in. It is the grand total of the entries in the Total column. Figure 1-2 below shows the filled-in table.

Item	Quantity	Price ($)	Total
Bolt	10	1	10
Nut	10	2	20
Widget	5	2	10
Dohickey	10	5	50

TOTAL $ſ90」

Figure 1-2 **Filled-in table**

Fill-in rules for tables can use the same operators as fields. Table entries can be used in fill-in rules with addition, multiplication, and division, plus with any other operator or feature used with fields.

Whenever <NEXT> is pressed and the caret enters a table entry in a column with a fill-in rule, the rule is used to calculate the data for that table entry and automatically fill it in. Whenever [UPDATE FIELDS] is selected from the document auxiliary menu, all the table columns with fill-in rules are automatically updated and filled in.

When a fill-in rule references a field, the name of the field is used in the rule. Table fill-in rules are more difficult to write because tables can have many parts: columns, subcolumns, rows, subrows, and individual entries. Although a table itself has a name, the individual parts of a table do not. Parts of a table are specified by using table pathnames. The sections that follow will show you how to write table pathnames in fill-in rules.

Summary

In this section, you studied how to use [UPDATE FIELDS] to update a table.

If you need more practice, complete the exercise again. Then delete your practice document.

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2. Specifying columns in fill-in rules

Overview

You studied how to update a table for which fill-in rules have already been written. In this section, you reference and fill in table columns and subcolumns.

When you complete this section, you should be able to determine table and column names, add column entries, and fill in a column and a subcolumn.

Determining table and column names

All tables, as well as all columns within a table, have names. The name of a table is found in the table frame property sheet. The name of a column is found in the column property sheet.

In the following exercise, you determine table and column names.

1. **Open** practice document TR PR 2-1.

   The first table in the document lists the current salaries of four employees (Figure 2-1). There is one field in the document which is the sum of the current monthly salaries of all employees. You are going to define a fill-in rule for this field to sum all the entries in the table column labeled Current Salary. To do this, you must get the name of the table and the name of the column.

2. **Select** [Edit] in the document header.

Getting the table name:

3. **Select** the first table.

Name	Current Salary ($)	Raise (%)	Increase ($)
Brown	2000	.08	
Jones	1500	.05	
Smith	2300	.06	
Wesson	1400	.05	

Figure 2-1 **Salary table**

4. **Press** <PROP'S>.

5. **Select** [TABLE] in the display option of the table property sheet.

6. **Remember** the table name. (The table name is Current.)

7. **Close** the property sheet.

Getting the column name:

8. **Select** the column labeled Current Salary.

9. **Press** <PROP'S>.

10. **Remember** the column name, which is Salary.

Notice that the label in the column heading is not necessarily the name of the column. The column heading is "Current Salary," but the actual name of the column is "Salary." Use the column name when writing fill-in rules . Do not use the label in the column heading.

The table name can also be found in the column property sheet. The table name is in front of the column name.

11. **Close** the property sheet.

A column in a table is written in a fill-in rule like this:

TableName.ColumnName

To reference the Salary column in the practice document, you would write:

Current.Salary

NOTE: Remember to place the period between the table name and the column name.

Adding column entries

You now know how to reference a column in a table. To add all the entries in a column together, use the SUM operator.

In the following exercise, you use the SUM operator.

1. Select the field at the top of the page in the practice document.

2. **Press** <PROP'S>.

3. Enter the fill-in rule:

SUM [Current.Salary]

This fill-in rule will add together all the entries in the Salary column of the table, and place the result in the field.

4. **Select** [DONE].

5. **Place** the caret in the field.

6. **Press** < NEXT>.

The field is updated with the value $7200. This is the sum of all the entries in the Salary column of the table.

NOTE: You will be asked to write various table fill-in rules in the sections that follow. The names of all tables and columns will be given to you.

Filling in a column

The first table in the practice document lists the current salaries of all employees in the Current Salary column, and their raises by percentage (%) in the Raise column. The Increase column should list each employee's raise in dollars. The values in the Increase column can be calculated by multiplying each salary in the Current Salary column by the respective percentage in the Raise column.

The first entry in the column is to be filled in by multiplying $2000 times 8%; the second entry is to be filled in by multiplying $1500 times 5%, and so on.

At this point, you are probably thinking that the fill-in rule for the Increase column should be:

Current.Salary * Current.Raise

This fill-in rule is almost correct, but it does not tell the system to take each row so that each salary will be multiplied by the appropriate percentage. To do this, you use a special notation:

[THIS ROW]

THIS ROW tells the system to perform a calculation once for each row in the column. The fill-in rule for the Increase column in the table is:

Current[THIS ROW].Salary *

Current[THIS ROW].Raise

Note that [THIS ROW] follows the table name but is before the period and the column name.

In the following exercise, you enter the preceding fill-in rule.

1. **Select** the Increase column.

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule:

Current[THIS ROW] .Salary*

Current[THIS ROW] .Raise.

NOTE: The fill-in rule property is at the bottom of the column property sheet.

4. **Select** [DONE].

5. **Select** [UPDATE FIELDS] in the document auxiliary menu.

The entries in the Increase column should now match those in the following figure.

Name	Current Salary ($)	Raise (%)	Increase ($)
Brown	2000	.08	160
Jones	1500	.05	75
Smith	2300	.06	138
Wesson	1400	.05	70

Figure 2-2 Updated fields

Filling in a subcolumn

Subcolumns in a table can also have fill-in rules. For example, the Salaries column in the second table in the document has three subcolumns. The first subcolumn lists each employee's salary for 1984, the second subcolumn lists the 1983 salaries, while the third column should list the difference in salaries for these two years. A fill-in rule needs to be written for this subcolumn.

As you already know, to reference a column, you write:

TableName.ColumnName

To reference a subcolumn, you write:

TableName.ColumnName.SubcolumnName

For example, in the table in Figure 2-3, the Current subcolumn would be specified as Employees. Salary.Current, while the Gross subcolumn would be specified as:

Employees.Salary.Current.Gross

Name	Salary ($)		
	Starting	Current	
		Gross	Net
Brown	1900	2300	2000
Jones	2100	2550	2250
Smith	1850	2200	1900

Figure 2-3 Subcolumns

In the following exercise, write the fill-in rule for the Difference subcolumn in the practice document. (The table name is Previous.)

1. **Select** the Difference subcolumn.

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule:

   Previous[THIS ROW] .Salaries.Y1984 -

   Previous[THIS ROW] .Salaries.Y1983

   This subtracts the 1983 salaries from the 1984 salaries.

4. **Select** [DONE].

5. **Select** [UPDATE FIELDS] in the document auxiliary menu.

   The subcolumn should be updated to the values shown in Figure 2-4.

Name	Salaries ($)		
	1984	1983	Difference
Brown	1905	1790	115
Jones	1390	1280	110
Smith	2150	2010	140
Wesson	1310	1200	110

Figure 2-4 **Updated difference subcolumn**

6. **Close** the practice document.

Summary

In this section, you studied how to:

● Reference tables and columns.

● Use the SUM operator to add column entries.

● Use [THIS ROW] to write fill-in rules for table columns and subcolumns

If you need more practice, complete the exercises again. Then delete your practice document.

3. Specifying rows in fill-in rules

Overview

You have referenced and filled in table columns and subcolumns. In this section, you reference rows, subrows, and individual table entries in fill-in rules.

When you complete this section, you should be able to write fill-in rules for fields and rows, as well as specify repeating rows.

Writing fill-in rules for rows

Figure 3-1 illustrates market research data of individual preferences regarding three leading colas in three cities.

	Los Angeles	New York	Dallas
Brand X	27	98	11
Super Cola	75	26	43
No-No Cola	20	42	12

Figure 3-1 Number of people preferring the three leading colas

The first field in the document shows the number of people who prefer Super Cola. This is the sum of the numbers in row 2 of the table. The notation for specifying a row is:

TableName[ROW #]

To specify the row listing the number of people who prefer Super Cola, you write:

Data[ROW 2]

The data for Super Cola is in the second row in the table. (The row containing the column headings is ignored in determining the number of a row. Thus the data for Brand X is in row 1, the data for Super Cola is in row 2, and so forth.)

In the following exercise, you write the fill-in rule so that the first field in the document is set to the total number of people who prefer Super Cola. (The name of the table is Data.)

1. **Open** practice document TR PR 3-1.

2. **Select** [EDIT] in the document header.

3. **Select** the first field in the document.

4. **Press** < PROP'S >.

5. **Enter** the fill-in rule:

SUM[Data[ROW 2]]

6. **Select** [DONE].

7. **Place** the caret in the field.

8. **Press** < NEXT >.

The field is updated to the value of 144.

The second field in the document is the total number of people polled. The fill-in rule for this field sums all of the numbers in the table.

In the following exercise, you create this fill-in rule.

1. **Select** the second field.

2. **Press** < PROP'S >.

3. **Enter** the fill-in rule:

   SUM [Data]

4. **Select** [DONE].

5. **Place** the caret in the field.

6. **Press** <NEXT>.

   The field is updated to the value 354.

The third field in the document refers to the number of New Yorkers who prefer Super Cola. This is the entry in the second row and second column of the table. The notation for specifying an individual entry is (assuming no subrows or subcolumns):

TableName[Row Number].ColumnName

In this particular case, the fill-in rule is:

Data[ROW 2] . NY

In the following exercise, you enter the above fill-in rule.

1. **Select** the third field in the document.

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule:

   Data[ROW 2] . NY

4. **Select** [DONE].

5. **Place** the caret in the field.

6. **Press** <NEXT>.

   The field is updated to 26. The fourth field in the document is updated to the total number of people polled in New York (166). This is the sum of the entries in the second column. Can you guess what the fill-in rule looks like? It is simply SUM[Data.NY].

7. **Scroll** to page 2 of the practice document.

Specifying repeating rows in fill-in rules

The previous notations for specifying table pathnames applied to tables with no repeating rows.

Pathnames for repeating rows are written with two row specifications: one to specify the main row containing the repeating row, and the other to specify the repeating row itself. The notation for specifying a repeating row is:

TableName [Main Row Number] . ColumnName [Repeating Row Number]

The table on page 2 shows the results of the taste tests broken down into two separate tests: Test A and Test B. The first field on the page represents the total number of people who prefer Super Cola in Test A. The fill-in rule for this field should sum the entries in the second subrow of the first row of the table.

The fill-in rule is:

SUM [TestData[ROW 1] . City [ROW 2]]

This notation tells the system to:

1. **TestData** - Look at the table called TestData.

2. **[ROW 1]** - Focus on the first row of the table. This is the row for Test A.

3. **City** - Focus on the column called City.

4. **[ROW 2]** - The second repeating row in this column has the data for Super Cola.

In the following exercise, you write the fill-in rule for this field.

1. **Select** the first field.

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule:

SUM [TestData [ROW 1].City [ROW2]]

4. Select [DONE].

5. **Place** the caret in the field.

6. **Press** < NEXT>.

The field is updated with the value 101. The next field is also updated with the number of people who prefer Super Cola in Test B. The fill-in rule for this field was already written for you. It is:

SUM [TestData [ROW 2]. City [ROW 2]]

The third field is the difference between the total number of people who prefer Super Cola in Test A as opposed to Test B. The fill-in rule for this field is the difference between the two previous fill-in rules. The rule is:

SUM [TestData [ROW 1]. City [ROW 2]] -

SUM [TestData [ROW 2]. City [ROW 2]]

In the following exercise, you enter this fill-in rule.

1. **Select** the third field.

2. **Press** <PROP'S>.

3. **Enter** the fill-in rule:

SUM [TestData [ROW 1]. City [ROW 2]] -

SUM [TestData [ROW 2]. City [ROW 2]]

4. Select [DONE].

5. **Place** the caret in the field.

6. **Press** < NEXT>.

The field is updated with the value 58.

The last field is the difference between the number of Los Angeles people who prefer Super Cola in Test A as opposed to Test B. This field should be filled in with the difference between the value 58 in the second repeating row of the first row, and the value 17 in the second repeating row of the second row.

The notation for specifying an entry in a repeating row is:

TableName [Row Number].ColumnName
[Repeating Row Number].SubColumnName

To specify the number of Los Angeles people who prefer Super Cola for Test A, the fill-in rule is:

TestData [ROW 1]. City [ROW 2].LA

This notation tells the system to:

1. **TestData** - Look at the table called TestData.

2. **[ROW 1]** - Focus on Row 1 (the results for Test A).

3. **City** - Focus on the column called City.

4. **[ROW 2]** - Focus on the second repeating row (the data for Super Cola).

5. **LA** - Focus on the subcolumn called LA. Since there is only one entry in the second repeating row and in the subcolumn LA, the notation specifies the one entry of 58.

The fill-in rule for the last field in the document is:

TestData [ROW 1]. City [ROW 2].LA -

TestData [ROW 2]. City [ROW 2].LA

This is the difference between the two table entries of interest.

In the following exercise, you write this fill-in rule:

1. Select the last field in the document.

2. Press < PROP'S >.

3. Enter the fill-in rule:

TestData [ROW 1]. City [ROW 2].LA -

TestData [ROW 2]. City [ROW 2].LA

4. Select [DONE].

5. Place the caret in the field.

6. Press <NEXT>.

The field is updated with the value 41.

7. Close the practice document.

Summary

In this section, you studied how to:

● Write fill-in rules for individual fields in a table

● Write fill-in rules for table rows

● Specify repeating rows in a fill-in rule

If you need more practice, complete the exercises again. Then delete your practice document.

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4.   An alternate way to specify a row

Overview

In the previous section, you specified table uses with row numbers. Using row numbers is not always convenient. For example, if you are writing a fill-in rule for a field in one document based on data in a table in another document, you may not recall the number of the row you are interested in.

The table in Figure 4-1 lists the salaries of several employees. The field below the table should be filled in with Mr. Smith's salary. The fill-in rule for the field in this example is:

Table [ROW 2]. Salary

Name	Salary $
Jones	2300
Smith	1500
Wesley	2100

Mr. Smith is currently earning a
salary of $⌈⌋.

Figure 4-1 Salary table

Now suppose that another employee is hired by the company. The revised table is shown in Figure 4-2.

Name	Salary $
Jones	2300
Madison	1800
Smith	1500
Wesley	2100

Mr. Smith is currently earning a salary of $⌐⌐.

Figure 4-2 New salary table

Since the data for Mr. Smith is now in row 3 instead of row 2, the previous fill-in rule is no longer correct. The new fill-in rule is :

Table [ROW 3]. Salary

In this section, you look at an alternate method of specifying rows in fill-in rules. It can be used for specifying a table's main row as well as a repeating row. This method guarantees that fill-in rules will work even after a particular entry has been moved to another row.

When you complete this section, you should be able to write an alternate row pathname.

Alternative for row pathnames

Instead of using row numbers, the alternate method of specifying row pathnames uses some criterion or comparison for finding the row of interest. For example, instead of telling the system to find row number 3, you can tell it to find the row for Mr. Smith.

The old notation of specifying a row as [ROW #] in a fill-in rule can be replaced with the new notation:

[ROW CALL IT ArbitraryName WITH Comparison]

The ArbitraryName (an arbitrary row name) indicated in the notation above is one you make up. Since table rows do not have names like table columns, this arbitrary row name allows you to reference the row by its name in the comparison.

The row notation for our example is:

[ROW CALL IT Person WITH Person.Name = "Smith"]

The complete fill-in rule for Mr. Smith's salary is:

Table [ROW CALL IT Person WITH Person.Name = "Smith"].Salary

replacing the old fill-in rule of:

Table [ROW 3]. Salary

The comparison in the example is:

Person. Name = "Smith"

In the following exercise, you use this fill-in rule in your practice document:

1. **Open** practice document TR PR 4-1.

2. **Select** [EDIT] in the document header.

3. **Select** the first field in the document.

4. **Press** <PROP'S>.

5. **Enter** the fill-in rule:

   Table [ROW CALL IT Person WITH
   Person.Name = "Smith"].Salary

6. **Select** [Done].

7. **Place** the caret in the field.

8. **Press** <NEXT>.

   The field is updated with Mr. Smith's salary.

The comparison in the example is:

Person. Name = "Smith."

The system searches every row, comparing each entry in the Name column with the name Smith until a match is found. It then looks in the Salary column for Smith's salary.

You have already learned about comparisons in a previous section. You can use any of the symbols (=, #, <, >, < =, = >) or operators (AND, OR, NOT) in the comparison for a row specification.

Alternative for repeating rows

The new notation for specifying row numbers works for repeating rows as well as for the main rows of a table.

The second table in the practice document lists the amounts that each employee has invested in the company's various savings plans (Figure 4-3). The second field in the document lists Mr. Smith's investments in the Stock Fund.

The fill-in rule for this field using the row number notation is:

Savings [ROW 3].Funds [ROW 2]. Balance

Name	Funds	
	Type	Balance ($)
Jones	General Fund	4800
	Stock Fund	2200
Madison	Savings Fund	1300
Smith	Special Fund	1400
	Stock Fund	1800
Wesley	General Fund	2100
	Savings Fund	4300
	Stock Fund	800

Figure 4-3 Savings plan investments

If you use the alternate notation for specifying the main row number, the fill-in rule is:

> Savings [ROW CALL IT Person WITH Person.Name = "Smith"].Funds [Row 2]. Balance

The repeating row can also be specified with the alternate notation by changing [Row 2] to read:

> [ROW CALL IT Fund WITH Fund.Type = "Stock Fund"]

The complete fill-in rule would be:

> Savings [ROW CALL IT Person WITH Person.Name = "Smith"].Funds [ROW CALL IT Fund WITH Fund.Type = "Stock Fund"].Balance

Summary

In this section, you studied how write an alternate row pathname that can be used for a table's main row as well as a repeating row.

If you need more practice, complete the exercise again. Then delete your practice document.

5.   Progress check

In Part II, you learned how to write fill-in rules for tables. To check your understanding, complete the following exercise.

You should be able to complete the exercise in 20 to 30 minutes. If you find this difficult, review the previous sections and try the exercise again.

There are two tables and several fields in the practice document. In the following exercise, you create fill-in rules to fill in the empty fields and table columns. The tables and fields have already been named for you. Open the property sheets to get the field, table, and column names.

1. **Open** practice document TR PC 5-1.

2. **Write** a fill-in rule for the column titled Net Change in the first table. This column is the difference between the stock price in 1985 and the stock price in 1984.

3. **Write** fill-in rules for the two fields in the document.

4. **Write** a fill-in rule for the column titled Total Profits in the second table. This column is the sum of the subsidiaries profits.

4. **Select** [UPDATE FIELDS] in the document auxiliary menu.

Check your answers against those on the following page.

Answers to progress check

The fields and tables in the practice document should be filled in with the values below.

The price of Ajax Computer's stock at the end of 1985 was $⌈41⌋ per share. Profits for Ajax's largest subsidiary, Buffalo Disks, was ⌈38⌋ million dollars.

Name	Stock Price ($)		Net Change ($)
	1984	1985	
Ajax Computers	34	41	7
Joe's Computers	23	32	9
Fred's Computers (And Sons)	28	34	6

Figure 5-1　Stock prices of the three leading computer firms

The fill-in rules are as follows. The numbers in parentheses indicate sections in which you will find details on each procedure.

1. For the Net Change column in the first table: (3)

   Stock[THIS ROW].Price.Y1985 -
   Stock[THIS ROW].Price.Y1984

2. For the first field: (3)

   Stock[ROW 1].Price.Y1985

Name	Subsidiaries		Total profits (in millions of $)
	Subsidiary	Profits (in millions of $)	
Ajax Computers	Buffalo Disks	38	60
	Ajax Printers	22	
Joe's Computers	Joe's Software Consultants	13	13
Fred's Computers (And Sons)	Fred's Software	31	46
	Fred's Minis	15	

Figure 5-2   Subsidiaries of the three leading computer firms

3. **For the second field: (4)**

    Table [ROW 1].Subsidiaries [ROW 1].Profits

    or:

    Table [ROW CALL IT Parent WITH Parent.Name = "Ajax Computers"]. Subsidiaries [ROW CALL IT Child With Child.Subsidiary = "Buffalo Disks"].Profits

4. **For the Total Profits column in the second table: (2)**

    Sum [Table [THIS ROW].Subsidiaries.Profits]

After you have finished checking your answers, close and delete the practice document.

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