

# BN/SIat

**Getting Started**  multimedia document communication software

This document reflects the BBN/Slate Release 1.1 software.

BBN Software Products
A Division of Bolt Beranek and Newman Inc.

Getting Started Copyright © 1990 by Bolt Beranek and Newman Inc. All Rights Reserved. No part of this work covered by the copyrights hereon may be reproduced or copied in any form or by any means — graphic, electronic, or mechanical, including photocopying, recording, taping, or information and retrieval systems — without written permission from the publisher:

BBN Software Products
A Division of Bolt Beranek and Newman Inc.
150 CambridgePark Drive
Cambridge, MA 02140

Latest Printing: October 1990

#### Restricted Rights Legend

Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or other Federal Acquisition Regulations.

#### Export Notice

This technical data, or any part thereof or direct product thereof, may not be exported or reexported, either directly or indirectly, into Afghanistan, the People's Republic of China, South Africa, Namibia or any of those countries listed from time-to-time in supplements to Part 370 to Title 15 of the Code of Federal Regulations in Country Groups Q, S, W, Y or Z (collectively, the "Prohibited Countries"), without first obtaining permission to do so from the U.S. Office of Export Administration and other appropriate governmental agencies.

BBN/Slate is a trademark of Bolt Beranek and Newman Inc.

PostScript is a registered trademark of Adobe Systems, Inc.

#### Contents

#### Preface v

Obtaining Documentation and Services xi

- 1 Using BBN/Slate for your everyday work 1–1
  Getting acquainted with BBN/Slate's features .1–2
  Using the BBN/Slate interface 1–4
  Using this book 1–4
- 2 Learning the Basics
  Starting BBN/Slate 2-2
  Opening folders and documents 2-6
  Moving through a document 2-11
  Managing folders and files 2-25
  Going on to the next chapter 2-31
  What you've learned 2-33
- Working with text 3–3

  Accessing on-line help 3–32

  Storing a document 3–35

  What you've learned 3–37
- 4 Using Electronic Mail
  Sending a document 4–1
  Composing and sending a new message 4–9
  Receiving mail 4–16
  What you've learned 4–22

# Creating Spreadsheets and Business Graphs Opening a new file 5-2 Editing a spreadsheet 5-3 Creating a spreadsheet 5-8 Refining the spreadsheet 5-28 Creating a piechart 5-40 What you've learned 5-48

## 6 Creating Graphics and Images Adding images from the file system 6–2 Adding a graphic from a BBN/Slate document 6–8 Editing a graphic 6–15 What you've learned 6–43

# 7 Printing Setting up to print 7–1 Adding a footer to your document 7–2 Previewing your document 7–6 Printing your document 7–11 Exiting from BBN/Slate 7–15 What you've learned 7–17

### 8 Epilogue What you've learned 8–1 Moving on from here 8–2

Index

#### Preface

This preface contains the following:

- an overview of this manual
- a list of the documentation conventions used in this manual
- an overview of the BBN/Slate<sup>™</sup> documentation

#### About this manual

BBN/Slate Getting Started introduces you to BBN/Slate multimedia document communication software. This tutorial provides you with practice exercises for learning the basics and offers suggestions for using BBN/Slate's more advanced features.

If you are new to BBN/Slate, *Getting Started* will get you up and running. You do not need to have any previous experience with the software to use this book.

If you have used BBN/Slate before, this book can give you new ideas for using the software in your everyday work. You can also use this book to remind yourself how to do basics tasks.

What you should already know

Before starting this tutorial, you should be familiar with your workstation. You should know how to get in and out of your windowing system and how to use a mouse.

If you are not comfortable using your workstation or do not know how to get into your windowing system, read your workstation documentation before continuing.

#### How this book is oraanized

This tutorial has eight chapters, each of which teaches you something new about BBN/Slate.

- Chapter 1 introduces you to BBN/Slate and tells you everything you need to know to use this book.
- Chapter 2 helps you start up BBN/Slate, shows you how to create folders and files, and walks you through a sample document.
- In Chapter 3, you create a file and learn to use BBN/Slate's text editor.
- Chapter 4 shows you the different ways to use BBN/Slate's electronic mail system. In this chapter, you learn to mail existing documents and compose new messages.
- In Chapter 5, you change information in a spreadsheet and then create a new one. You also learn to analyze data and to make a piechart.
- Chapter 6 shows you how to add images from the file system and create your own graphics.
- In Chapter 7, you learn how to put your BBN/Slate documents into printed form.
- Chapter 8 gives you a glimpse of the other activities available in BBN/Slate.

#### Documentation conventions for this manual

Unless otherwise noted in the text, this book uses the conventions described in this section.

#### Mouse operations

To tell you which mouse button to use and how to use it, this book gives the button first, followed by the action.

- The button can be the left, middle, or right button.
- The action can be click, hold, drag, or release.

For example:

left click

means you click with the left mouse button.

Boldface font

This boldface font, when preceded by a diamond, designates actions you should take as part of the tutorial exercise. For example, the following text:

♦ Left click on the compose button.

means that you click on the compose button using the left mouse button.

Text you type

Text that you enter in the editor appears in this font and is indented from the margin. For example, you would enter the following text in the editor:

Project Saturn is a software package that runs on most workstations.

<RET> and <TAB> The Return and Tab keyboard keys are designated by <RET> and <TAB> whenever they follow text that you type in. For example, in the following text:

100 \* 45 <RET>

you type the characters before the <RET>, and then press the Return key.

Menu options

Menu options are given with the form:

menuname-option

For example, the following menu option:

Text-Fonts-Face-Italics

shows that Text is the top-level menu, Fonts is a submenu of Text, Face is a submenu of Fonts, and Italics is an option of the Face menu.

Italic font

This italic font identifies new terms and book names.

Monospace font

This monospace font indicates names of folders, documents, buttons, and menus. For example, the following names all appear in monospace:

+Welcome folder

Introduction document

show button

Print menu

#### Overview of BBN/Slate documentation

User documentation The BBN/Slate documentation set includes the following manuals:

- Getting Started introduces you to BBN/Slate through a series of tutorial exercises.
- The Reference Manual gives a complete description of the BBN/Slate system.
- The Customizing Manual explains how you can tailor the BBN/Slate system to fit your needs. Topics include reconfiguring the menu system, and writing your own programs using the Slate Extension Language (SEL).

- System Topics is a collection of documents covering system topics such as the structure of BBN/Slate document files, command-line document management tools, and mail utility programs.
- Multilingual Documents describes how to create documents in five other writing systems (Arabic, Cyrillic, Hangul, Hebrew, and Thai) available with the BBN/Slate Multilingual Option.

  Note: If you did not order the Multilingual Option, you will not receive this manual.

On-line help

In addition to the printed documentation, BBN/Slate has an on-line menu help facility that provides information on all command and menu choices. Also, BBN/Slate provides on-line UNIX manual pages with information about BBN/Slate's command-line programs and utilities.

Installation and release notes

System-specific installation instructions and release notes supplement the BBN/Slate user documentation set.

## Obtaining Documentation and Services

This section explains how you can:

- order documentation
- obtain technical assistance
- obtain training services

#### How to order documentation

To order additional copies of this manual or any other BBN/Slate manual:

• In North America, mail a completed purchase order to:

BBN Software Products A Division of Bolt Beranek and Newman Inc. 10 Fawcett Street Cambridge, MA 02138 ATTN: Sales Administration

For prices and other ordering information, call Sales Administration at 617/873-5115.

• Outside North America, contact the nearest Sales and Support office.

#### How to obtain technical assistance

For BBN/Slate customers who are on maintenance and need technical assistance:

- In North America, call the Hotline number: 617/873-3968. Hotline hours are Monday through Friday, 8:30 a.m. to 8 p.m. (EST).
- Outside North America, contact the nearest Sales and Support office.

#### How to obtain training

BBN supports its customers and products with a full range of training programs. BBN/Slate courses are offered in conjunction with hardware vendors or at BBN education centers. In addition, arrangements can be made with the Education Services department to present the same courses at customer sites.

To receive a course catalog or additional information:

- In North America, call the Course Registrar at 617/873-8383.
- Outside North America, contact the nearest Sales and Support office.

#### **1** Introduction

Welcome to BBN/Slate multimedia document communication software — a system designed to help you develop ideas and share information. BBN/Slate gives you a complete set of integrated tools normally found only in multiple software packages. Through BBN/Slate's document editor, you can use these tools to develop multimedia documents and share them with people across the office or around the world.

This chapter introduces you to the main features of BBN/Slate, shows you how to use BBN/Slate in your everyday work, gives you an overview of the BBN/Slate interface, and tells you how to use this self-paced tutorial.

#### Using BBN/Slate for your everyday work

Creative communication

Think of BBN/Slate as a creative communication tool. Use it to create your everyday documents as well as special materials for presentations and meetings. However, don't limit yourself to using BBN/Slate just as a document-creation tool. You can also make use of BBN/Slate's communication abilities.

Creating documents

With BBN/Slate, you can create everything from on-line newsletters to graphical presentation materials to reports. Any document can contain any number of media types, from text to graphics to speech.

#### Communicating information

You can communicate information using BBN/Slate's electronic mail facility, which lets you mail any multimedia document. You can also confer with other users or attach voice annotations — your own digitized speech — within any document. If you need to share data with other users, use the BBN/Slate enclosure feature.

#### Getting acquainted with BBN/Slate's features

At the center of BBN/Slate is an integrated document editor, where you create and modify multimedia documents. These documents are made up of *media types*, such as text and graphics. BBN/Slate gives you lots of features for working with documents in the document editor.

Media types

BBN/Slate includes a full array of media types, including text, spreadsheets and business graphs, images, graphics, digitized speech, and enclosures. Each media type has its own editor that you use to create and modify elements of that media type.

**Text.** Most of your multimedia documents will probably contain text, although you don't have to include text. The text editor lets you choose from several type styles and sizes. If you have the Multilingual Option, you can create text in languages other than English.

Spreadsheets and business graphs. For presenting and analyzing financial or other numerical information, you can create spreadsheets. The spreadsheet editor lets you create line charts, bargraphs, and piecharts, which you can easily generate from your spreadsheets and regenerate whenever you change values or formulas in the spreadsheet itself.

**Graphics.** In the graphics editor, you can create line drawings complete with geometric shapes, fill patterns, built-in arrow styles, and text.

**Images.** You can create or import your own images, which may be scanned photographs, drawings, or screen captures from your workstation display.

**Digitized speech.** With the proper hardware, you can insert and play back digitized speech annotations. Using the speech media type, you can make comments on documents you are reviewing or just add a personal touch to a document.

Enclosures. Enclosures let you send files such as UNIX® programs or data files to other BBN/Slate users. Depending on the file you send, the recipient can edit, execute, and print the enclosure.

Electronic mail

Anything you can create in BBN/Slate, you can send through electronic mail. Mail makes it easy for you to gather information from other people and share your own ideas with others. Now you can send documents containing the above media types through the mail.

Because mailing a multimedia document doesn't affect the media types, recipients can work with the mailed copy as if it were an original. For example, if you send a spreadsheet to someone to review, that person could change some values and send the spreadsheet back to you.

Electronic conferencing

To help you collaborate more easily with others, BBN/Slate includes a conferencing feature. Several people can confer over a document, although only one person at a time has control over the document. With the conferencing feature, you can reconcile different opinions about a document or hold brainstorming sessions.

Similar to the conferencing feature, the conversation window lets you type in a dialog with other users without carrying on the phone conversation that you would have in a standard conference.

Extension Language BBN/Slate's built-in programming language lets you customize and expand the system for yourself or for your work group. With the Slate Extension Language (SEL), you can automate many of the tasks you do every day.

#### Using the BBN/Slate interface

BBN/Slate works with your workstation's windowing system. As with other workstation software, you select menu options and operate buttons by using a mouse, and if you like, keyboard shortcuts.

This tutorial helps you become comfortable with the BBN/Slate user interface by guiding you through the creation of a multimedia document. After you finish with the tutorial, refer to the BBN/Slate Reference Manual if you have any questions about the user interface.

#### Using this book

This tutorial helps you learn BBN/Slate by walking you through creating, sharing, and printing multimedia documents. To benefit the most from *BBN/Slate Getting Started*, work through each chapter in order, as the exercises build on each other.

In this tutorial, you learn how to work with most of the BBN/Slate media types, including text, graphics, images, and spreadsheets and business graphs. Each chapter teaches you how to work with a

particular media type or feature. For instance, in Chapter 3, you learn how to use the text editor by creating a document, and in Chapter 4, you learn about electronic mail by sending, forwarding, and reading messages.

The Epilogue (Chapter 8) gives you a glimpse of the other activities available in BBN/Slate. Turn to the Epilogue to learn about more advanced features of each of the media types and about media types that this tutorial doesn't cover. For more information about any of the activities in the Epilogue, see the *Reference Manual*.

#### 2 Learning the Basics

In this book, you assume the role of a product manager at a high-tech company. You are currently managing the most recent addition to your company's product line — a software package code-named "Project Saturn."

Your boss has asked you to present information about Project Saturn at a company meeting in only a few days. Fortunately, your company has just obtained BBN/Slate, and you and your boss are confident that it will help you meet the tight deadlines facing you.

While working through this book, you create presentation materials that you will hand out at the company meeting. By creating these materials, you learn about using BBN/Slate to make multimedia documents and share information with others.

Excited about using BBN/Slate, you sit down at your workstation. During this session, you:

- start BBN/Slate
- · open folders and documents
- move through a document
- · learn how to manage folders and files

#### Starting BBN/Slate

#### Before you begin

To work through this tutorial, you must have BBN/Slate already installed on your system, and you should be in your windowing system. If BBN/Slate is not already installed on your system, see the BBN/Slate Installation Instructions to install the software yourself, or have someone else do it for you before you continue.

#### Getting into BBN/Slate

Start BBN/Slate from within your windowing system.

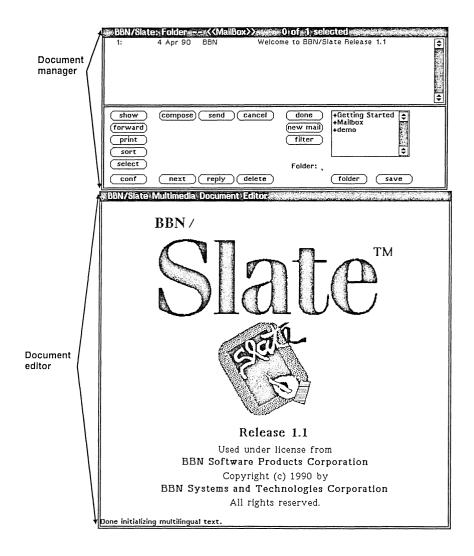
- ♦ Enter your windowing system if you haven't already.
- **The Enter the following command from within a window:** 
  - % slate <RET>

If you do not have BBN/Slate installed on your system, you see this error message:

#### slate: Command not found

If you see this error message, you must first install BBN/Slate before you can continue.

If you do have BBN/Slate installed, you see the following start-up screen:



#### BBN/Slate start-up screen

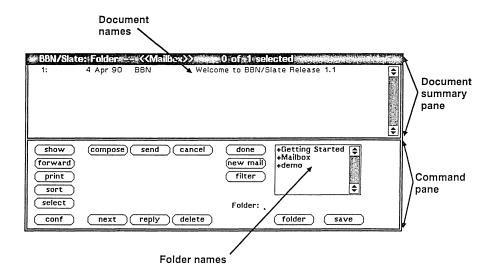
BBN/Slate divides the start-up screen into two windows, a document manager window, and a document editor window.

The document manager, divided into two sections, or *panes*, lists all of your BBN/Slate folders and files. Below the document

manager is the document editor, where you work with BBN/Slate documents. Depending on how your system has been set up, the document editor may appear beside the document manager rather than below it.

The top pane of the document manager, or document summary pane, contains information about all of the BBN/Slate files in the current folder. Non-BBN/Slate files in the folder (such as bitmapped images) do not appear in the listing.

The bottom pane, or *command pane*, contains command buttons that help you work with folders and files. You'll learn how to use these buttons later.



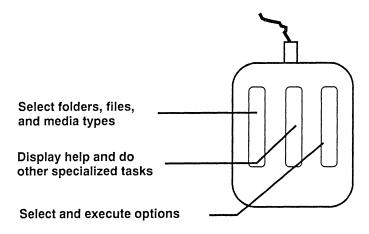
#### Document manager

Using the mouse

Before moving into the tutorial exercises, take a few minutes to get familiar with using the mouse in BBN/Slate.

The mouse has three buttons, each of which has a special function in BBN/Slate:

- Use the left button to select folders, files, and media types within documents.
- Use the middle button to display help messages and to perform other specialized tasks.
- Use the right button to select and execute options from menus.



#### Using the mouse

You use the mouse buttons by *clicking*, *holding*, and *dragging*. To click, press the button and release. Sometimes, you may need to double-click, or press the button twice quickly.

To hold, press and hold the button down. To drag, press the button down, move the mouse (according to the task you are doing), and release.

The instructions in this tutorial tell you the button to use and whether to click, hold, or drag. For example, if the instructions tell you to "Left click on the document name," then position the pointer over the document name and click once using the left mouse button.

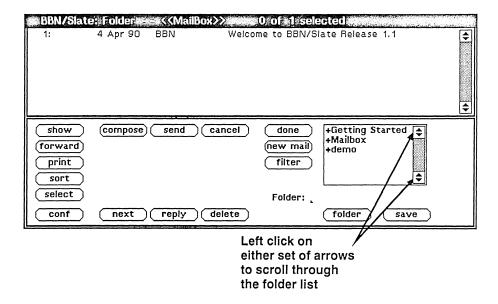
#### Opening folders and documents

BBN/Slate comes with a sample document designed to acquaint you with the software. This document, called Introduction, appears in a folder called +Getting Started. Your boss has recommended that you look at this document before creating your own BBN/Slate files.

Opening a folder

In the document manager, you should see the folder name +Getting Started, which contains the sample documents you use while working through this tutorial. You also see a folder called +Mailbox, which is where you receive mail, and a folder called +demo, which contains more sample documents. All folders in BBN/Slate begin with the plus sign (+).

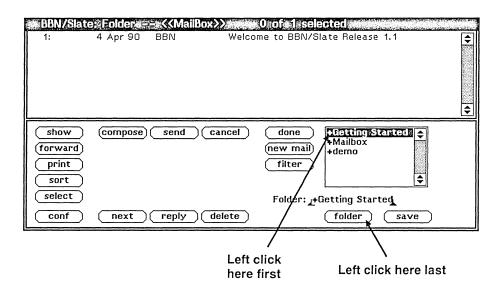
If you are a new user and are working in your own account, you should see only three folders in the folder list. If you don't see the name +Getting Started in the folder list, left click on either set of arrows beside the list until you see the name.



Moving through the folder list

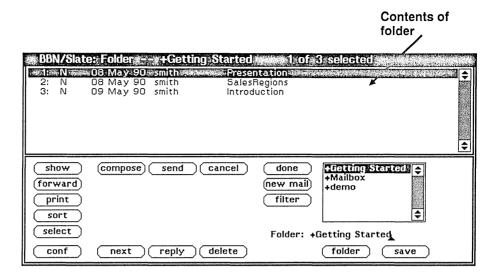
To open a folder, you highlight its name in the folder list and click on the folder button.

- ♦ Using the left mouse button, click on the name +Getting Started.
- ♦ Left click on the folder button.



#### Document manager

The contents of the +Getting Started folder appear in the document summary pane.



Contents of the Getting Started folder

Opening a document

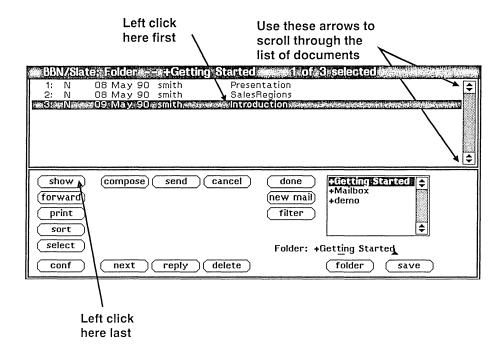
Your manager has told you that the document acquainting you with BBN/Slate is called Introduction. You want to see what the document contains, so you open it and see it in the document editor window.

To open a document, highlight its name and click on the show button.

♦ Using the left mouse button, click on the document name Introduction.

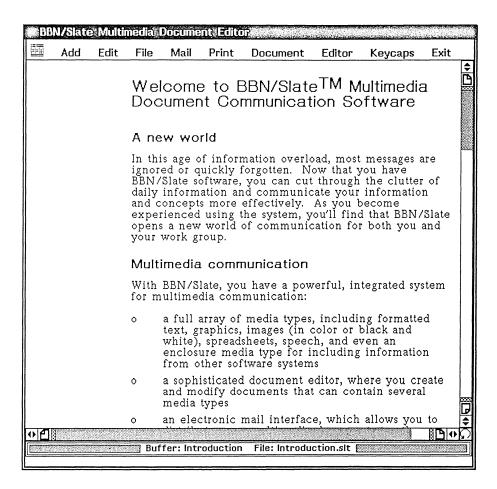
Once you've become more experienced with BBN/Slate, you will have created many files, and all of your files in a given folder may not be visible at once. If this happens, scroll through the list by left clicking on the arrows in the scroll bar beside the document summary pane.

• Left click on the show button.



#### Opening a document

In a few seconds, the Introduction document appears in the document editor.



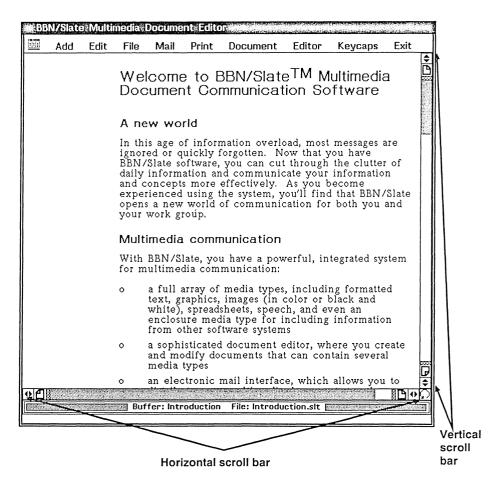
#### Document editor

Don't worry that you can't see all of the document. You'll learn how to move through a document in the next section.

Notice that you used the left mouse button to open folders and files. In the next section, you use all three mouse buttons to move through a document.

#### Moving through a document

Whether creating, editing, or just reading a BBN/Slate document, you need to know how to move around it quickly. You move through a document using the scroll bars on the side and bottom of the document editor.



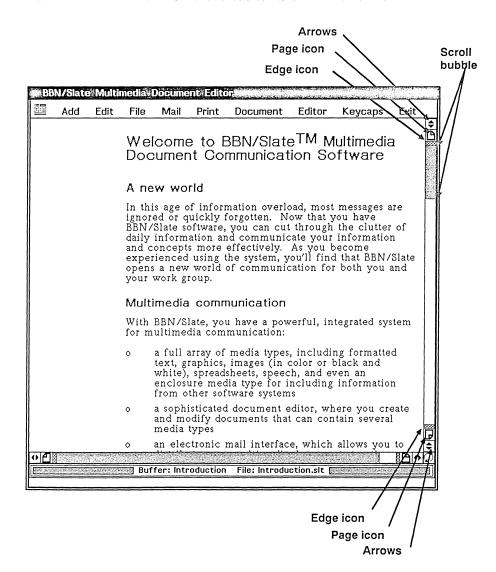
#### Scroll bars in the document editor

Most often, you'll scroll through a document vertically, or page by page. Sometimes, though, you may have to move horizontally to see all of a wide spreadsheet or large graphic.

Moving vertically

Using the icons in the vertical scroll bar, you can move down and up in a document. The next figure shows the arrows, page icon, and edge icon in the vertical scroll bar. Notice that the icons appear both at the top and the bottom of the scroll bar.

You'll learn how to use these icons in the next few sections.



Icons and scroll bubble in the scroll bar

This figure also shows you the scroll bubble, which tells where you are in the document. The length of the scroll bubble tells how much of the document is visible, and the position of the bubble within the scroll area tells which part of the document is visible.

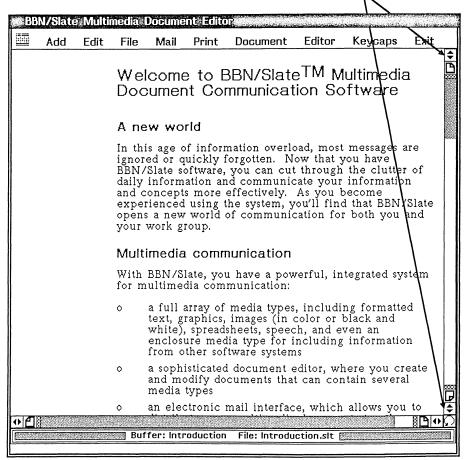
For instance, in this figure, the scroll bubble takes up about a third of the scroll bar, which means that you are you are looking at about a third of the document. The bubble is at the top of the bar, which means that you are looking at the beginning of the document.

Scrolling a line at a time

First scroll through Introduction a line at a time. To move down one line, you left click on either the top or bottom set of arrows.

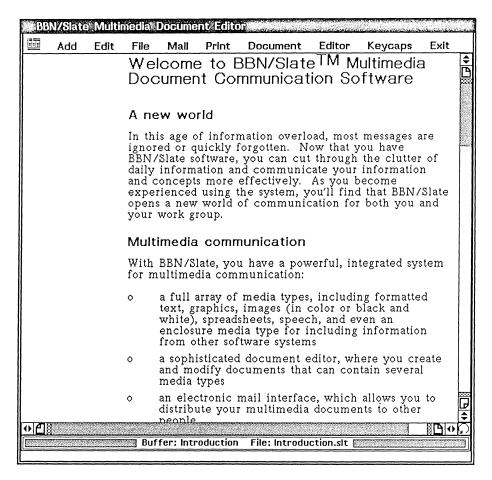
**Description** Left click on either set of arrows.

Left click on either set of arrows



#### Scrolling down a line

The document scrolls down one line.

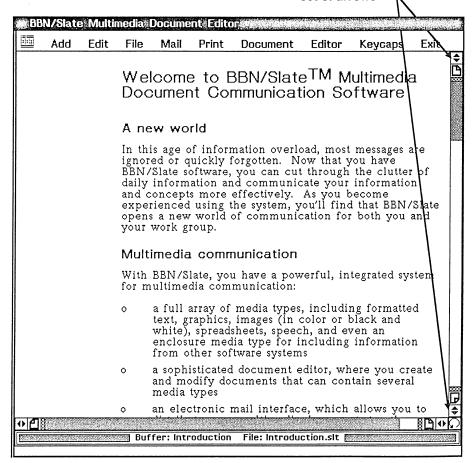


#### After scrolling down a line

To scroll up a line, you right click on either the top or bottom set of arrows.

A Right click on either set of arrows.

Right click on either set of arrows



#### Scrolling up a line

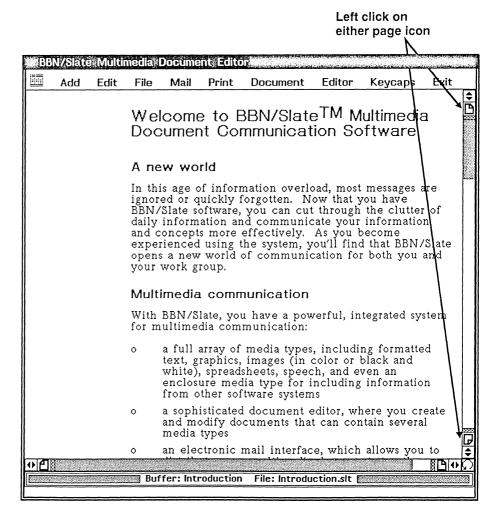
You move back up to the first line of the document.

Remember: to move down through a document, left click. To move up, right click.

Paging through a document

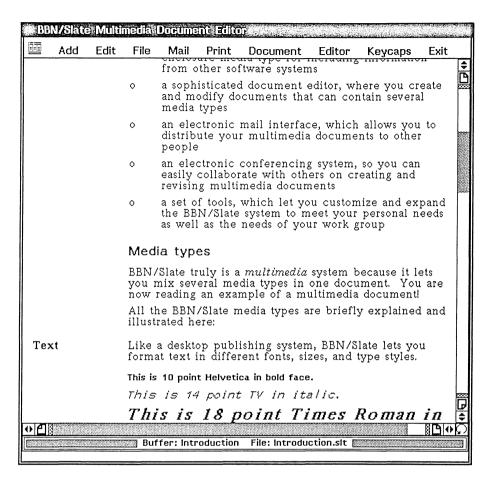
You can page through the document by using the page icons on the vertical scroll bar. To move down a page, you left click on either page icon.

♦ Left click on either page icon.



#### Paging down through a document

You move down one page.

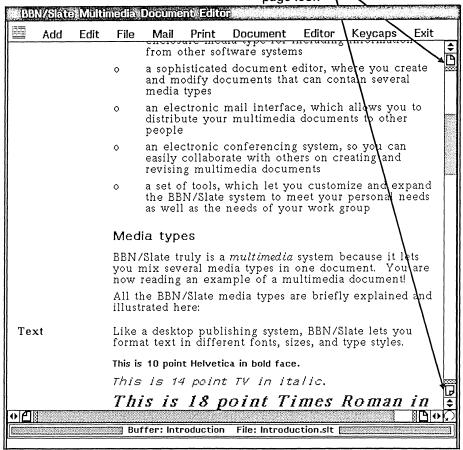


#### After moving down one page

To move up a page, you right click on either page icon.

& Right click on either page icon.

Right click on either page icon



#### Moving up one page

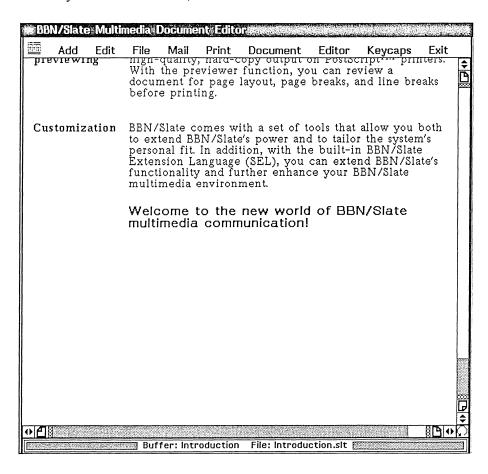
You move up one page.

You can use either the top or the bottom arrow or page icons to move through a document. Remember to left click on either icon to move down and right click to move up.

Now read through the rest of the document by paging through it.

#### ♦ Left click on either page icon until you reach the end.

When you reach the end, the screen will look like this:



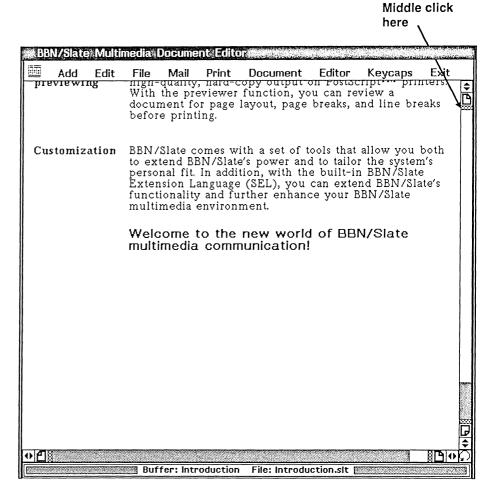
Paging to the end of a document

Moving to the beginning or end of a document

Edge icons move you to the beginning or end of a document. To move to the beginning, you middle click on the top edge icon; to move to the end, you middle click on the bottom edge icon.

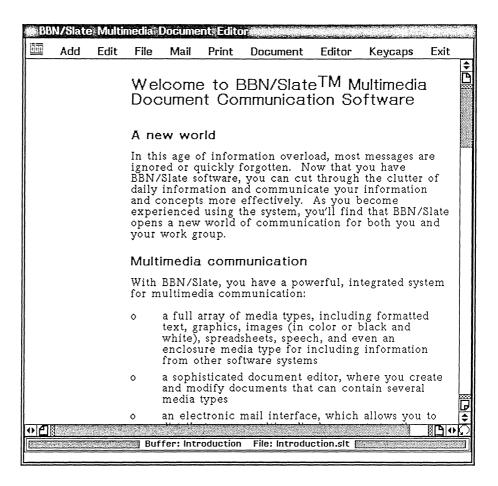
Now that you've read through the Introduction document, you decide to re-read something at the beginning, so you move there using the top edge icon.

#### Middle click on the top edge icon.



#### Moving to the beginning of a document

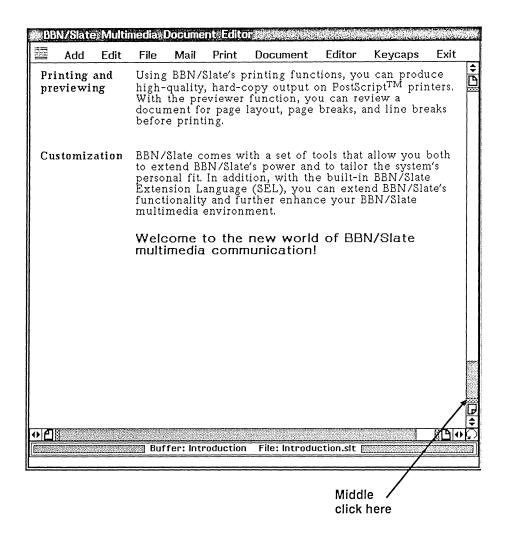
You see the top of the document.



#### After moving to the top of the document

You can move to the end of the document in the same way.

A Middle click on the bottom edge icon.



#### Moving to the end of the document

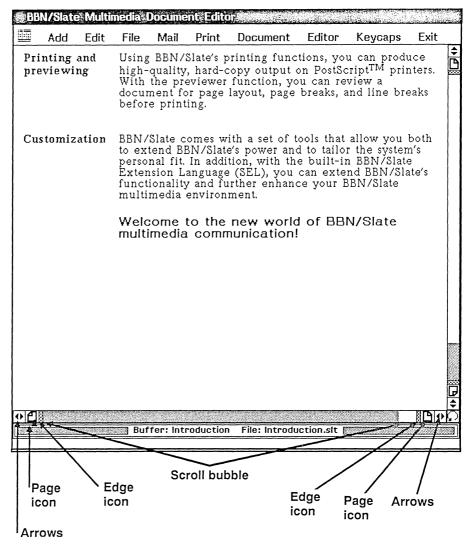
You move to the end of the document. This is the first time that you've used the middle mouse button. Most of the time, you'll use only the left and right buttons.

Moving horizontally

Most of the time you only need to move up and down through a document. If you have a wide graphic or large spreadsheet, however, you may need to move horizontally to see the entire

graphic or spreadsheet. You can move right and left in a document using the icons in the horizontal scroll bar.

The following figure shows the arrows, page icons, edge icons, and scroll bubble in the horizontal scroll bar.



Horizontal scroll bar

Like the vertical scroll bubble, the horizontal scroll bubble tells where you are in the document. The length of the bubble tells how much of the document is visible, and the position of the bubble within the scroll area tells which part of the document is visible. For example, in this figure, the scroll bubble takes up almost the entire scroll bar, which means that you are looking at nearly the whole width of the document.

Experiment on your own to learn to use the horizontal scroll bar. If your document has a standard width, you can probably see most of it without scrolling across. If you do scroll across and see a blank screen, you can get back to the left-hand edge by right clicking on either page icon until you see text again.

Use the following table to move across a document.

To Move	Use this Action	On this Icon
One space to the right	Left click	Arrows (either set)
One space to the left	Right click	Arrows (either set)
One page to the right	Left click	Page icon (either)
One page to the left	Right click	Page icon (either)
Right edge	Middle click	Right edge icon
Left edge	Middle click	Left edge icon

Moving across a document

### Managing folders and files

After reading through the Introduction document, you decide to put a copy in a separate folder called +New. Don't worry

about the document currently in the document editor; you manage folders and files from the document manager, so it doesn't matter if a file is currently in the editor.

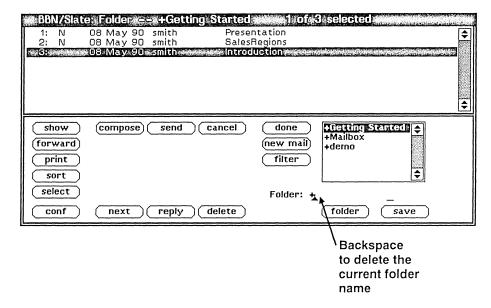
You create a new folder and then copy the Introduction document into it. You also copy other files from the +Getting Started folder into the +New folder.

Creating a folder

To create a folder using existing documents, you select the files you want to copy or move. You then name the new folder and copy or move the files into it.

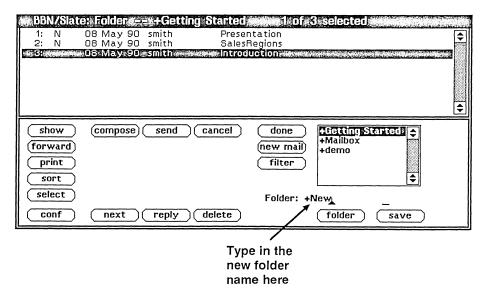
You are already in the +Getting Started folder, which is where the original documents are stored. Now select the file you want to copy and name the new folder.

- ♦ If the name Introduction isn't already highlighted, left click on it once.
- ♦ Erase the folder name +Getting Started by placing the cursor at the end of the name and backspacing.



Erasing the existing folder name

♦ Type in the name of the new folder, +New, under the folder summary box.

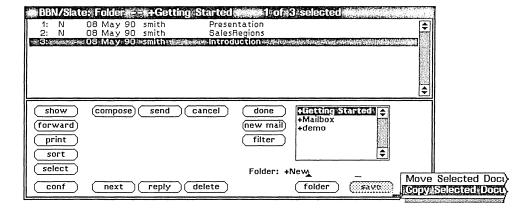


Naming the new folder

You have named the new folder. If you want to give a folder a two-word name, separate the two words with an underscore, period, or other distinguishing character.

Now copy files into it by using the save button.

- Right hold on the save button.
- ♦ Drag right to highlight the Copy Selected Documents to Folder option as shown in the next figure. Release.



#### Copying a document to a new folder

This button, like all the buttons in the document manager, has an underlying *pop-up* menu. When you left click on a button as you did earlier to open folders and files, BBN/Slate automatically selects the first option on this menu.

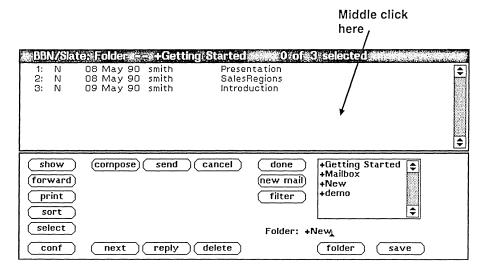
To select any of the other options, right hold to display the pop-up menu. You can then choose the option you want by highlighting the option and releasing.

Copying several documents at once

You have now copied the file Introduction to your +New folder. Now copy the files Presentation and SalesRegions to the +New folder. You'll use these documents in the rest of the tutorial.

You can copy several documents at once by holding down the Shift key while you select them. First, deselect Introduction so that you don't copy it again.

♦ Middle click inside the document summary pane.

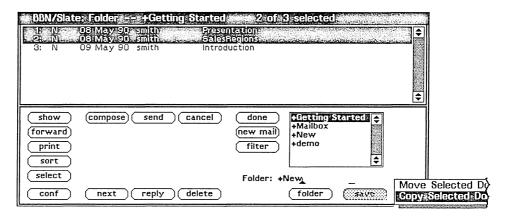


#### Deselecting a document name

The Introduction document is no longer highlighted. Now select the other two documents.

- **4** Hold down the Shift key.
- Left click on the names Presentation and SalesRegions in the folder listing.
- Right hold on the save button.

 Highlight the Copy Selected Documents to Folder option. Release.

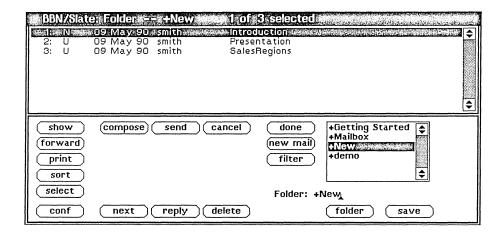


Copying more than one document

To check that you copied them correctly, display the contents of the +New folder. Earlier, you opened a folder by highlighting its name and clicking on the folder button. This time, use a shortcut and double-click on the folder name to open it.

♦ Using the left button, double-click on the name +New in the folder list.

All three files now appear in the document summary screen.



#### Contents of a newly created folder

To make sure that you copied the documents correctly, take a look at one of them. Use the same shortcut to open the document.

## ♦ Using the left mouse button, double-click on the name Introduction.

The copy of Introduction appears in the document editor. Because you didn't alter the original Introduction document, BBN/Slate removes it from the editor.

## Going on to the next chapter

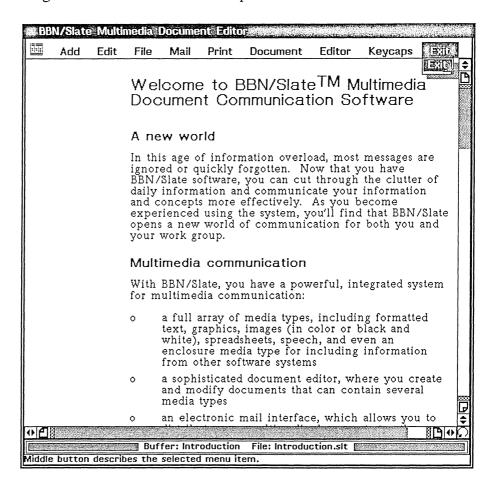
Moving on immediately

If you aren't taking a break before moving on to the next chapter, leave the Introduction document in the document editor. You can skip over the rest of the next section and go on to the last section, called "What you've learned."

Optionally exiting

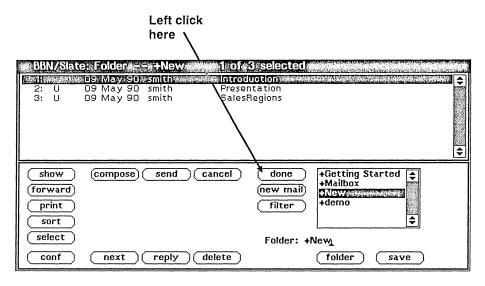
You may want to rest before going on to Chapter 3. To leave BBN/Slate completely and then come back to the tutorial, first exit the document editor.

To exit from the document editor, right hold on the Exit menu. Drag down to select the Exit option and release.



#### Exiting from the document editor

The document editor closes. Next exit from the document manager by clicking on the done button.



Exiting from the document manager

Your window manager iconifies the document manager and places it on your desktop. You can now either exit from your windowing system or stay within your windowing system and continue to work in other programs.

## What you've learned

In this session, you learned how to:

- start BBN/Slate
- open a folder
- open a document
- · copy files from one folder to another

You will use these skills in your everyday work as well as in the rest of this tutorial. In the next chapter, you learn how to create text documents inside the document editor.

## 3 Creating a Text Document

Reading through the Introduction document has made you excited about the possibilities of BBN/Slate. Your presentation on Project Saturn has given you the perfect opportunity to try out the software.

You are to present Project Saturn at a company meeting in only three days. Normally, you would have protested that three days was not enough time to put together a presentation. After all, the colleagues you need information from are located across the world. But like you, these people also have BBN/Slate. Exchanging complex information with them will now be as simple as sending an electronic mail message.

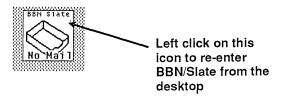
You start by drafting an outline. In later chapters, you'll send this outline to your colleagues for feedback. During this work session, you:

- work with text
- learn how to get help from BBN/Slate
- store a document

Before you begin

If you exited from BBN/Slate at the end of Chapter 2, first re-enter the system. From your operating-system, get into BBN/Slate as you did at the beginning of Chapter 2.

If you iconified the document manager, left click on the icon to re-enter the system.



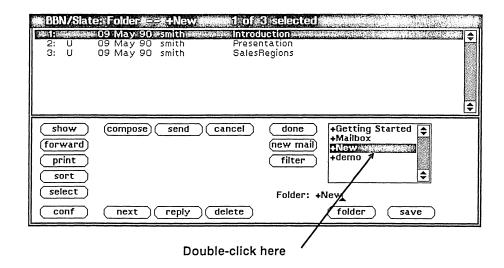
#### Re-entering BBN/Slate

The document editor and document manager then appear.

Making sure you are in the correct folder

Before beginning, make sure that you are in the +New folder. Double-click on the name +New in the folder list to be sure you are in the correct folder.

♦ Using the left mouse button, double-click on the name +New in the folder list.



Making sure you are in the +New folder

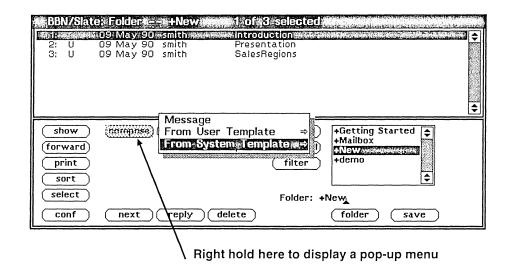
### Working with text

To create your outline, you open a new file and begin typing in text.

Opening a new file

To open a new file, you use the compose button in the command pane and select the type of document you want to compose.

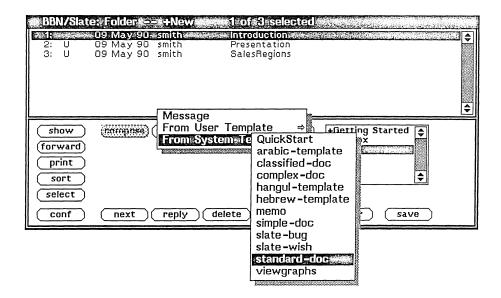
Right hold on the compose button in the document editor.



#### The compose pop-up menu

This pop-up menu lets you choose the type of document you want to compose. If an option on a pop-up menu is followed by an arrow, that option leads to another menu, called a *submenu*. You access a submenu by dragging further to the right until the submenu appears.

- Drag right to highlight the From System Template option.
- Drag further right to highlight the standard-doc option from the submenu.
- Release.



#### Selecting a standard document format

A blank buffer appears in the document editor. A buffer is a temporary storage area where you work on your document before storing it in a file.

The name of the buffer (in this case standard-doc) and the name of the file appear at the bottom of the document editor. Since you have just opened this document and have not saved it to a file yet, you see no file name at the bottom of the editor.



Blank buffer in the document editor

The standard-doc option is a *template*. BBN/Slate comes with several templates, or documents containing certain text styles, which you can use over and over again. When saving a document created from a template, you save only the document itself. The template remains blank so that you can use it again. You can also create your own templates. See the *BBN/Slate Reference Manual* for information on creating templates.

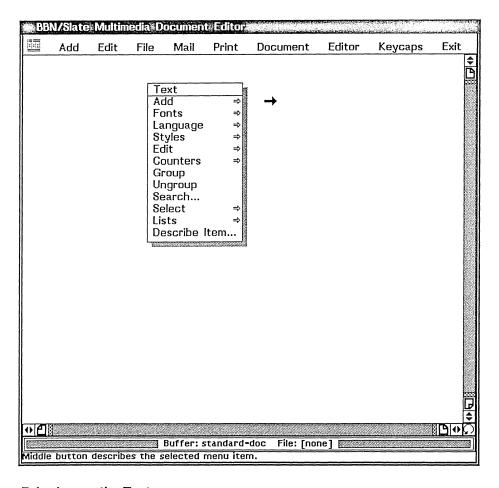
Entering text

You can begin entering text. Start by creating an opening paragraph for your outline.

• Move the pointer inside the document editor window.

Placing the pointer inside the window makes it active. You can't work in a window unless it is active.

♦ Right hold inside the document editor to bring up the Text menu.



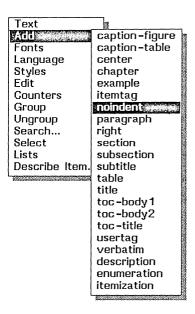
Bringing up the Text menu

The Text menu is a pop-up menu that appears whenever you right hold inside a text area. Each media type — including text, graphics, spreadsheets, and others — has its own pop-up menu.

# ♦ Highlight the Add option, and drag right to display the next submenu.

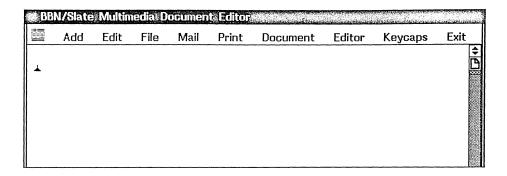
Notice all of the options you have on this submenu. Each of these options, from caption-figure to itemization, represents a *text style*. BBN/Slate has lots of different text styles, and you can also create your own.

### Highlight the noindent option. Release.



#### Selecting the noindent style

The cursor appears on the margin.

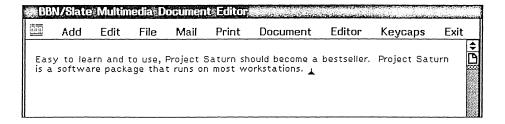


#### Cursor ready for text

#### ♦ Type in the following text:

Easy to learn and to use, Project Saturn should become a bestseller. Project Saturn is a software package that runs on most workstations.

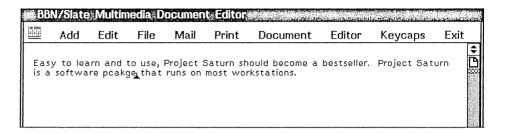
The text should look something like this:



#### Typing a paragraph

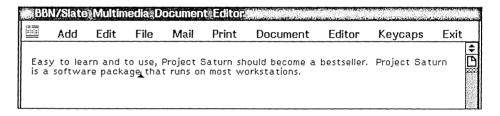
Correcting mistakes

If you make any mistakes, you can correct them using the Delete or Backspace key. If you find a mistake after typing in the whole paragraph, you can move back to the mistake using the arrow keys or by pointing and clicking with the left mouse button. For example, if you had misspelled the word package as in the following figure, you would move the pointer inside the document editor and left click after the mistake.



#### Correcting a misspelled word

You would then press Backspace or Delete to delete the incorrect letters, and type in the correction.

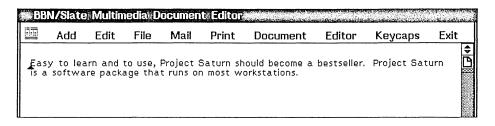


#### Typing in the correct letters

Adding a heading

After you type in the paragraph, you think of an idea for a heading and decide you want the heading centered.

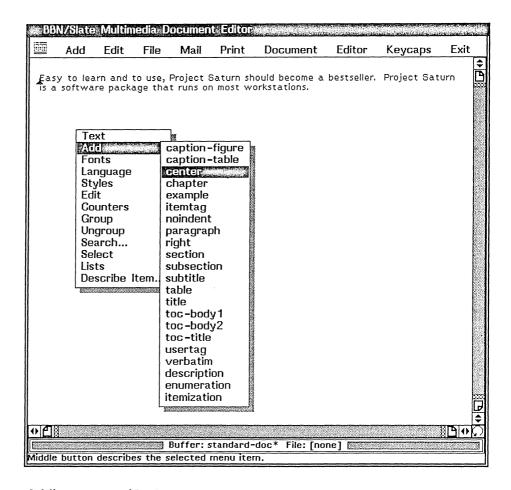
• Place the cursor before the first word in the paragraph by pointing and left clicking.



#### Placing cursor at the beginning

You've placed the cursor at the very beginning of the document and are ready to enter the centered heading.

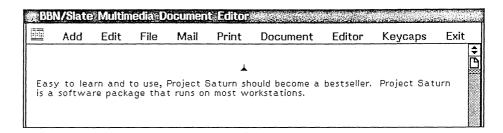
- ♦ Right hold inside the document editor to bring up the Text menu.
- ♦ Highlight the Add option, and drag right to display the next submenu.
- ♦ Drag right and down to highlight the Center option.



Adding centered text

#### Release.

The cursor moves to the center of the line, and you are ready to enter the text of the heading.

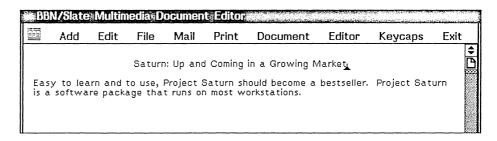


#### Cursor ready for centered text

♦ Type in the text for the heading, as shown below:

Saturn: Up and Coming in a Growing Market

As you type, BBN/Slate centers the text in the middle of the line. When you are finished, the heading should look like this one:

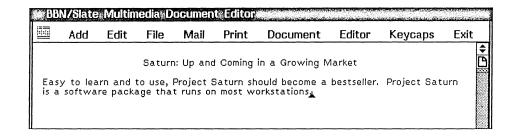


#### After adding a centered heading

Adding a list

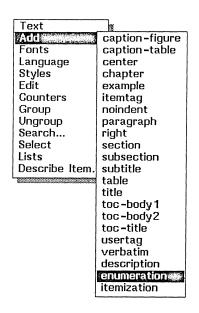
You are ready to begin your outline. Because your ideas are sketchy, the outline will not be very formal or detailed. You start by making a list of the three major points you want to make at the presentation.

♦ Place the cursor at the end of the paragraph and left click.



Cursor before beginning a list

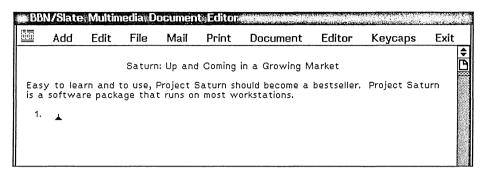
Right hold to bring up the Text menu. Drag down to highlight Add, then drag right and down to highlight enumeration. Release.



Adding an enumerated list

The number 1 appears automatically in the left margin. If you didn't select the correct text style and do not see a number 1 on the margin, press the Backspace or Delete key until you return to the end of the paragraph and then begin again.

In addition to enumerated lists, BBN/Slate has lists beginning with descriptions (description) and bullets (itemization). You can also create your own list styles.



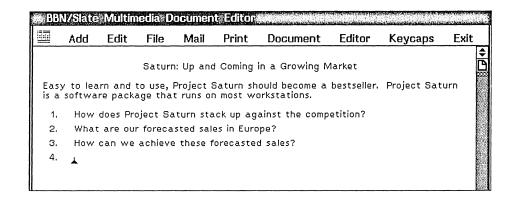
#### Cursor ready to begin a list

Now type in the three major points.

♦ Type in the list of points as shown below: At the end of each list item, press Return:

How does Project Saturn stack up against the competition?
<RET>

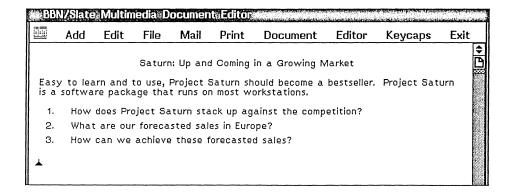
What are our forecasted sales in Europe? <RET>
How can we achieve these forecasted sales? <RET>



#### Typing in an enumerated list

When you press Return, the number for the next list item appears. After you press Return following the third item, a number 4 appears. Since you only want three items, end the list here.

#### • Press Return once more to end the list.



#### Ending a list

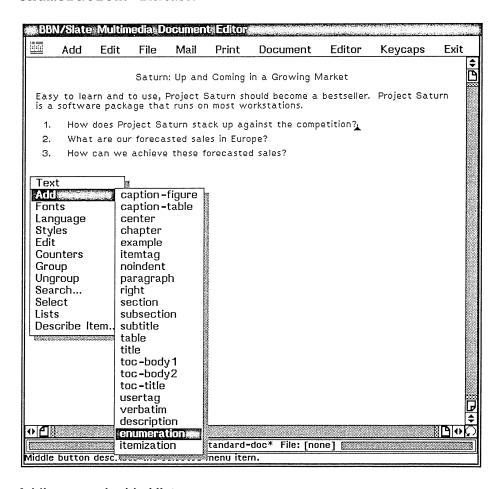
Notice that the last number (in this case, 4) is now gone. You can end any list by pressing Return twice.

Embedding lists

Now that you have the major points sketched out, you are ready to add some subpoints. With BBN/Slate, you can easily embed lists within lists.

Start by adding three subpoints below the first major point.

- Place the cursor at the end of the first list item. Left click.
- Right hold to bring up the Text menu. Drag down to highlight Add, then drag right and down to highlight enumeration. Release.



#### Adding an embedded list

A new line appears beginning with the letter A.



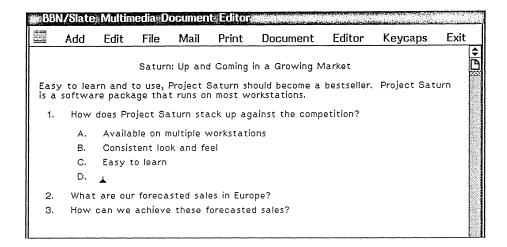
#### Cursor ready for an embedded list

Now enter the text of your subpoints.

♦ Type in the text of subpoints A, B, and C as shown below. At the end of each list item, press Return:

Available on multiple workstations <RET>
Consistent look and feel <RET>
Easy to learn <RET>

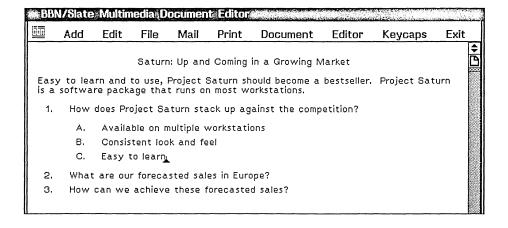
The text should look like the list in the next figure.



#### Embedding a list

When you press Return at the end of subpoint B, you added a third subpoint. You delete it using the Delete key.

♦ Press the Delete key to get rid of the letter D.



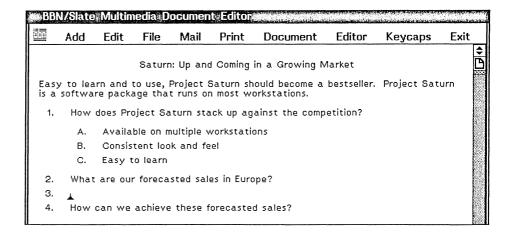
Ending an embedded list

If you ended the sublist by pressing Return twice, you have an extra line in between subpoint C and point 2. Delete it by pressing the Delete key.

## Adding to the main list

While adding the subpoints to number 1, you thought of another main point. You make it the new third point.

- ♦ Place the cursor at the end of the second major point. Left click.
- Press Return to add a new list item.

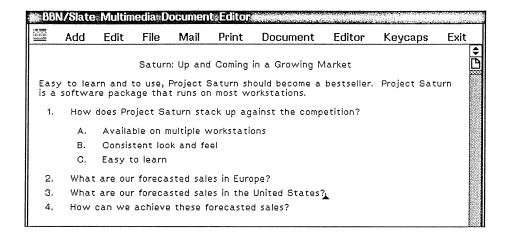


#### Adding a new list item

♦ Type in the text shown below. When you reach the end, don't press Return:

What are our forecasted sales in the United States?

When you are finished, the list should look like the one in the following figure.



#### Adding to the main list

This time you ended a list item by not pressing Return. If you did press Return, you can delete the new number 4 by pressing the Delete or Backspace key.

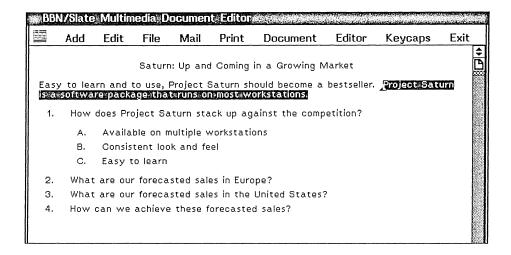
Notice that the system renumbers the list items. Your new list item automatically becomes number 3, and the old number 3 becomes number 4.

Cutting and pasting text

You read what you've produced so far. It looks fine, but the first paragraph isn't quite right. You decide to move the second sentence to the beginning of the paragraph.

♦ Place the cursor at the beginning of the second sentence. Left drag all the way to the end of the paragraph. Release.

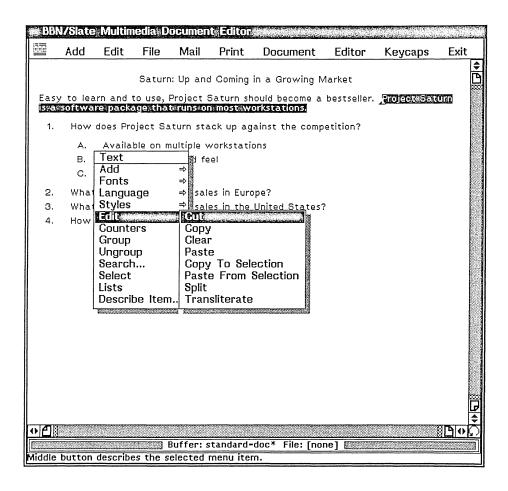
The second sentence is highlighted. Whatever option you choose now will affect only the highlighted text.



#### Highlighting text

Now cut the text using the Edit-Cut option from the Text menu.

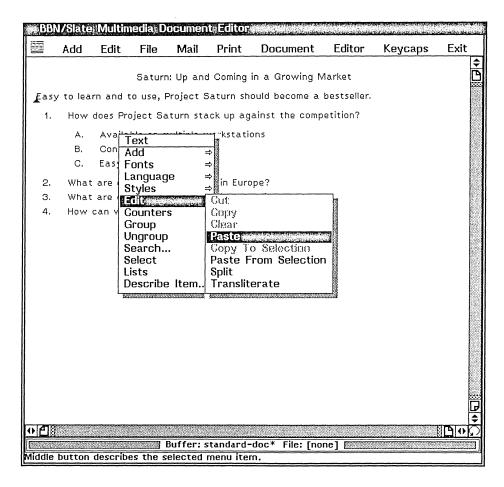
♦ Right hold to bring up the Text menu. Drag down to highlight the Edit option, then drag right to highlight the Cut option. Release.



#### Cutting text

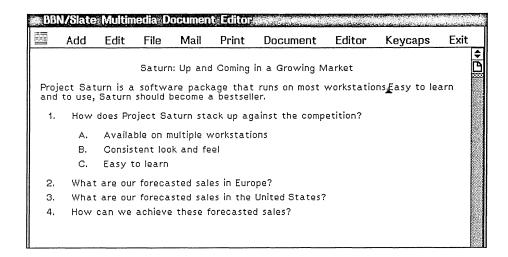
The text disappears. Now paste the text at the beginning of the paragraph.

- ♦ Place the cursor at the beginning of the paragraph. Left click.
- Right hold to bring up the Text menu. Drag down to highlight the Edit option, then drag right to highlight the Paste option. Release.



#### Pasting text

The text appears in its new position. By cutting the text, you placed it on a temporary clipboard, or storage area. When you pasted the text, you retrieved it. The clipboard can hold one item at a time (i.e. one chunk of text, one spreadsheet, or one graphic) and replaces it with the next item you cut or copy.

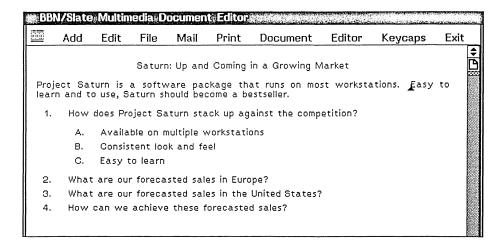


#### Document with pasted text

Now add two spaces to separate the two sentences.

#### Press the Spacebar twice.

The paragraph should now look like this:

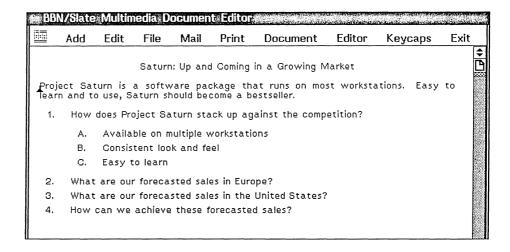


#### After adding spaces

Editing the text

The first sentence doesn't sound quite right yet, so you edit it.

♦ Left click before the word "Project" in the first sentence.



#### Document after deleting text

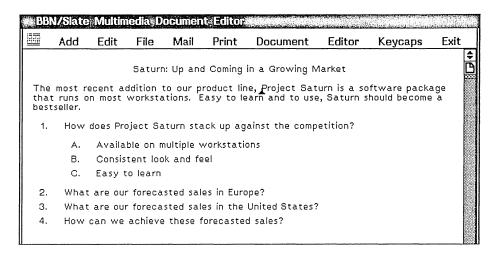
Type in a new beginning.

♦ Type in the following text:

The most recent addition to our product line,

♦ Press the Spacebar once.

After editing, the first paragraph should look like this:

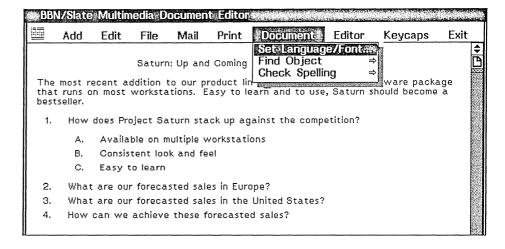


#### Document with new text

Changing the type style

Now that you have the content of your outline finished, you want to improve the way it looks. You decide to change the type style of the entire document.

♦ Right hold on the Document menu at the top of the document editor. Drag down to highlight Set Language/Font. Release.



#### Changing the document font

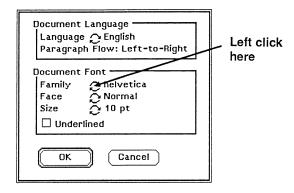
The menus that appear on the *menu bar* at the top of the document editor control the entire document. Think of the menu bar as a control panel for the whole document and the pop-up menus inside the editor as control panels for individual media types.

You can select menus from the menu bar using either the left or right mouse button. Use the button that feels comfortable to you.

When you select the Set Language/Font option, a *dialog box* appears on the screen. BBN/Slate uses dialog boxes to prompt you for the information it needs to do a particular task.

In this case, BBN/Slate asks you to set the language and font for the entire document. If you have the Multilingual Option, you could use this menu to set the language script (such as Russian or Hebrew) of the document. Right now, you are only using it to set the font family and font size.

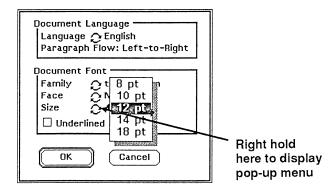
♦ Left click on the cycle button beside Family until you see timesroman appear.



#### Changing the font family

You can select items from a *cycle button* by left clicking until the choice that you want appears, or you can display a menu by right holding on the cycle button.

- A Right hold on the cycle button beside Size to display a pop-up menu. Drag right to highlight 12 pt. Release.
- ♦ Left click on OK.



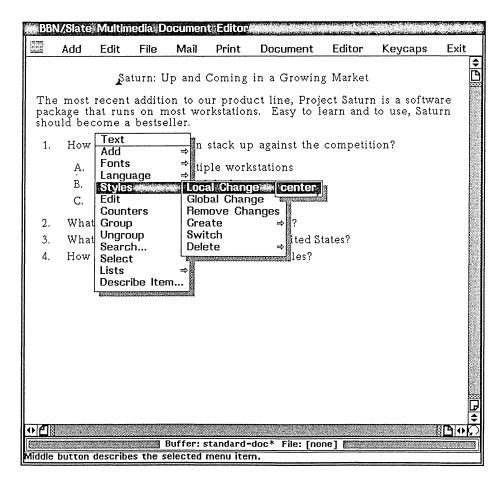
Changing the font size

The text in the entire document now appears in a different font.

Editing the heading

Next, you continue to enhance the look of the document by making the centered heading larger and boldface.

- Place the cursor at the beginning of the heading. Left click.
- ♦ Right hold to display the Text menu. Drag down to highlight Styles. Drag right to highlight Local Change and then center. Release.

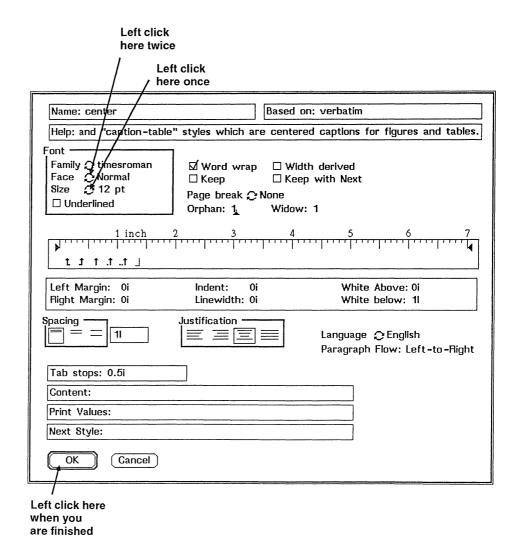


Changing a text style locally

A dialog box appears. This dialog box contains information about the text style center. Because you are making a local (rather than a global) change to the text style, any changes you make in this dialog box affect only the instance of the text style at the cursor.

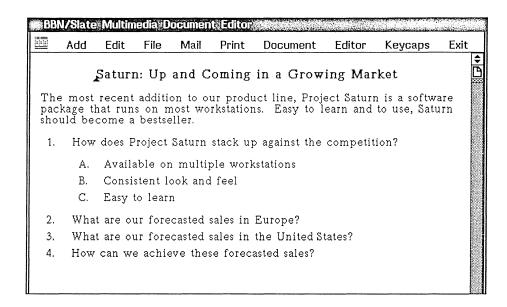
Change the type face and size by clicking on the Face and Size cycle buttons.

- ♦ Left click on the Face cycle button until Bold appears.
- ♦ Left click on the Size cycle button until 14 pt appears.
- ♦ Left click on the OK button.



## Changing the type size and face

The larger, bolder heading appears.



#### Document with enlarged heading

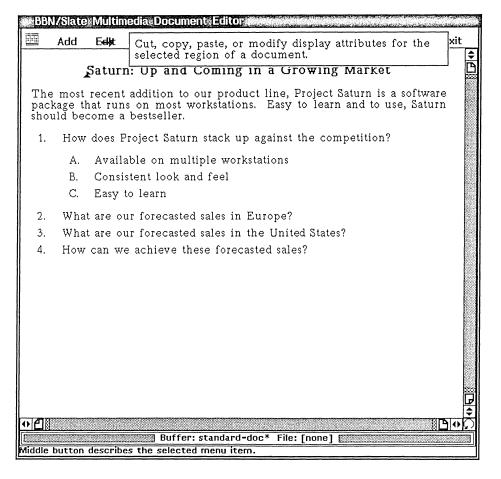
## Accessing on-line help

Satisfied with your new document, you are ready to store it and take a coffee break. You aren't sure how to store your document, so you use BBN/Slate's help system.

Getting help

To get help, use the middle mouse button. You can middle click on menus, menu options, and buttons to find out what each does.

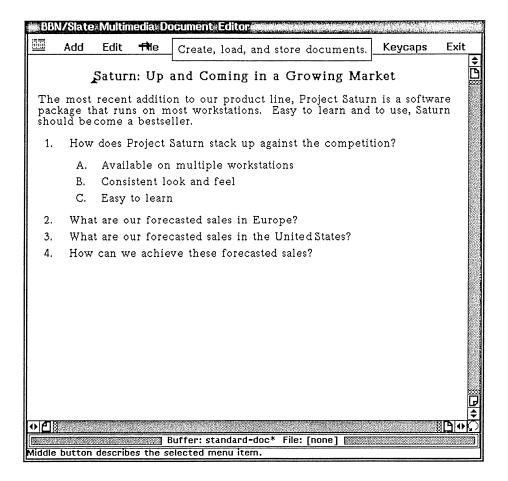
Middle hold on the Edit menu on the menu bar.



#### Getting help on the Edit menu

You see a help message explaining that the options under the Edit menu cut, copy, paste, and modify display attributes. Because you don't see anything about storing, you look for help on another menu.

- **♦** Release.
- Middle hold on the File menu on the menu bar.



#### Getting help on the File menu

The help message tells you that you can use the File menu to store documents.

#### Release.

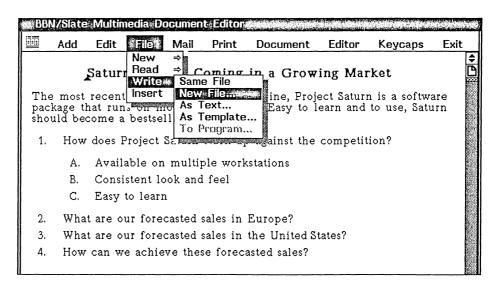
## Storing a document

When you work on a file, you work on a copy of it in a buffer rather than on the file itself. After you've finished editing it, you can store your changes to the file or abandon the changes. After using the help system, you know that you use the File menu to store documents.

## Saving a document

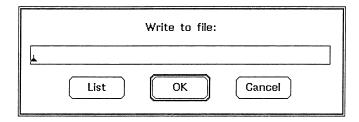
To save a document, you use the Write-New File option under the File menu.

- Right hold on the File menu on the menu bar.
- ♦ Drag down to highlight the Write option, then drag right to highlight the New File option. Release.



#### Saving a file

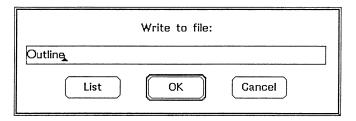
You see a dialog box that asks you to type in the name of the new file.



Dialog box for saving a file

You name the file Outline by typing the name in the dialog box. BBN/Slate accepts names in upper or lower case or any combination of the two.

- ♦ Type in the name Outline.
- ♦ Left click on the OK button.



Naming a file

In many dialog boxes, including this one, you can press Return instead of clicking on OK.

Your outline is saved in a file called Outline in your +New folder. Keep the outline in the document editor because you will work on it in the next chapter. If you want to exit from BBN/Slate before moving on to the next chapter, leave the system as described at the end of Chapter 2.

## What you've learned

As you created your outline, you learned how to:

- enter and edit text
- cut and paste blocks of text
- change text fonts and sizes
- get help
- save a document

You've also learned how to use the mouse buttons to select text and menus within the document editor. In the next chapter, you'll mail the document you just created.

# 4 Using Electronic Mail

After finishing your outline, you decide to send it to a colleague who works on Project Saturn and ask for a review of the structure. In this chapter, you:

- send a document which includes some additional comments for your colleague
- · compose and send a new message
- receive mail

Because you are working in an imaginary scenario, you can't really send electronic mail messages to people working on Project Saturn. Instead, you'll send the messages to yourself. In the real world, you would replace your own name in the electronic mail header with the name of a real recipient.

Before you begin

Before beginning, make sure that you are in the +New folder and that the document Outline which you created in the last chapter is displayed in the document editor.

If you exited BBN/Slate at the end of the last chapter, first re-enter the software as shown at the beginning of Chapter 3. Then open the +New folder and the document called Outline.

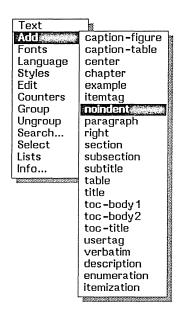
## Sending a document

You want a colleague to take a look at your outline on Project Saturn. Before sending it, you need to add a few additional comments for your colleague.

Adding explanatory comments

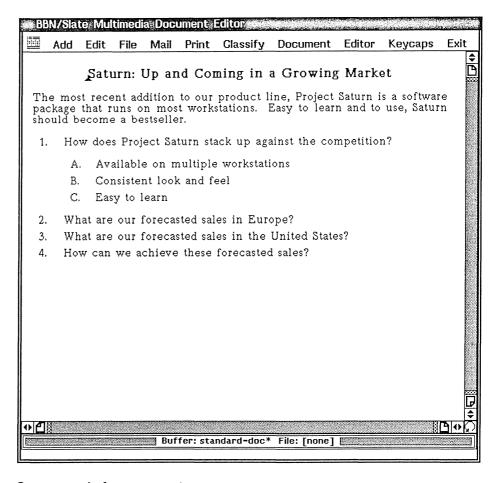
If you send this document now, your colleague probably won't know why you've sent it. You add some comments to explain the outline by selecting the Add-noindent option from the Text menu. This option tells the text editor to add a new text style, in this case, a style called noindent. The noindent style is a paragraph block without an indented first line.

- ♦ Left click at the beginning of the centered heading.
- ♦ Right hold to bring up the Text menu. Highlight the Add option, then highlight the noindent option. Release.



Adding a new text style

The cursor is ready for you to enter your text.



#### Cursor ready for comments

## **Enter the following comments:**

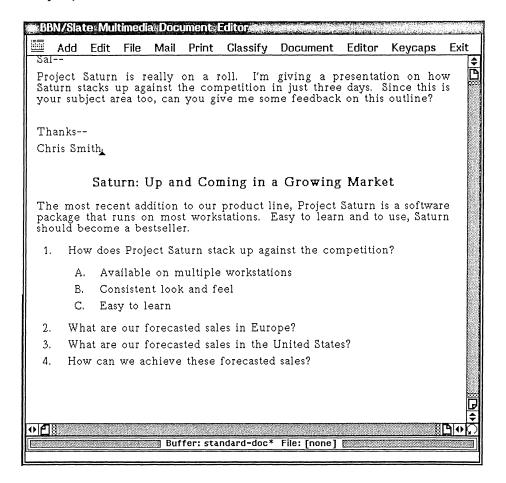
Sal-- <RET>

Project Saturn is really on a roll. I'm giving a presentation on how Saturn stacks up against the competition at a company meeting in just three days. Since this is your subject area too, can you give me some feedback on this outline? <RET>

Thanks-- <RET>

Your name <RET>

After adding the comments, your outline should look like the one below. Note that the user's name in this case (and throughout this chapter) is Chris Smith.

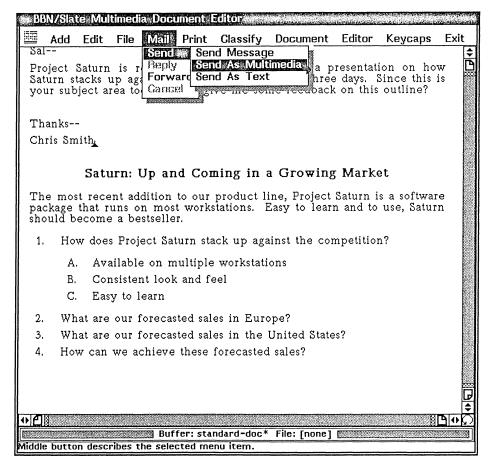


#### Outline with explanatory text

Sending the message

After adding the explanation, you are ready to send the outline. To send a message already in the document editor, you use the Send option from the Mail menu on the menu bar.

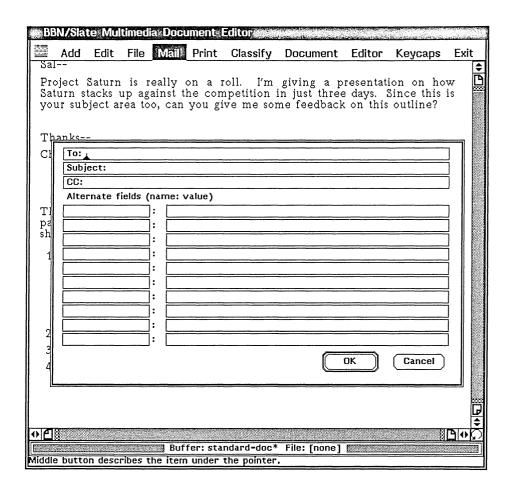
♦ Right hold on the Mail menu on the menu bar. Highlight the Send option, then highlight the Send as Multimedia option. Release.



#### Sending a multimedia mail message

Usually, you use the Send as Multimedia option when you are sending a document containing media types other than text. Here, you send a text message as multimedia just for practice.

BBN/Slate attaches a *mail header* to your outline and displays a dialog box in which you enter information. This is the information BBN/Slate needs to deliver your messages.



#### Document with mail header and dialog box

Filling out a mail header

When you fill out a mail header, you tell BBN/Slate who to send the document to. You can also add a subject line and send copies to other people. You enter this information in fields.

♦ Type in your own user name in the To field. Press Return.

Normally, you would type in the name of the person to whom you want to send the document. In this exercise, you send all mail to yourself.

## ♦ Type in the following subject line. Press Return:

Outline for Project Saturn presentation <RET>

The mail header should now look something like this.

Type in your own username here			
/			
To: smith	$\neg$		
Subject: Outline for Project Saturn presentation	=		
CC:			
Alternate fields (name: value)			
nicornaco notas (namo: valuo)	$\neg$		
<del>                                   </del>			
<del>                                   </del>			
	-		
	-		
	-		
]: [	<b>┙</b>		
OK Cancel			

#### Filling out a mail header

You don't want to send copies to anyone, so you leave the CC field blank.

The alternate fields listed below the CC field give you space to create your own categories in the mail header. For instance, you might want to rank the urgency of your mail by creating an Importance field similar to the Subject and CC fields. You could then identify a high priority message by labeling it URGENT, as shown in the following figure. (Following a standard UNIX electronic mail convention, you should start any personal fields such as this one with an X-.)

To: smith			
Subject: Outline for Project Saturn presentation			
CC:			
Alternate fields	(nar	me: value)	
X-Important	7:	URGENT	
	<u> </u>		
	<b>\_</b> :		
	ገ:		
	፟፝፧		
	∏:		
	<u> </u>		
	∏:		
	آ:		
		OK Cancel	

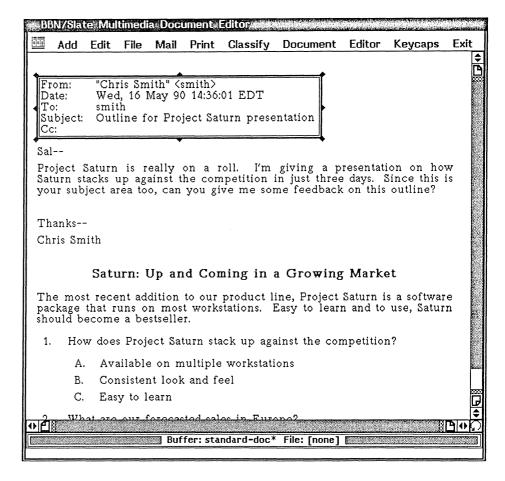
#### Filling in alternate fields

You don't want to add any alternate fields to this message, so you leave them blank.

#### ♦ Left click on OK to finish the header.

The dialog box disappears, and BBN/Slate displays a status message at the bottom of the document editor telling you that it is sending the message. If BBN/Slate is unable to send the message, you will see an error message giving you the reason.

After sending the message, the system redisplays the message and its attached mail header. This header contains the sender's name, the date, the recipient's name, the subject line, and the names of anyone receiving copies.



#### Message with attached header

You can leave the message in the editor as you go on to compose a new message.

## Composing and sending a new message

Your outline is now out in the world, getting a review. You can turn your attention to other parts of the presentation. After thinking about the information you need in the presentation, you decide that a colleague in Lisbon might have suitable facts and

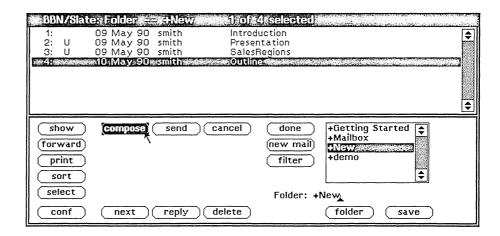
figures. Since this colleague also has BBN/Slate, you send a BBN/Slate message.

To send a message, you use the compose button to bring up a standard mail message template, fill out the mail header, compose the message, and send it.

Composing a new mail message

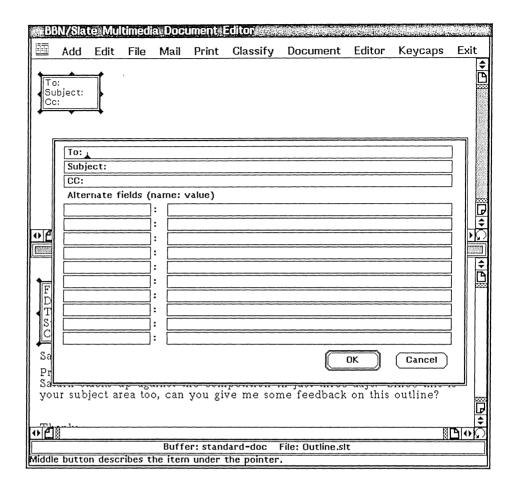
To compose a new message, you use the compose button in the document command pane.

♦ Left click on the compose button in the document and folder command pane.



#### Using the compose button

The document editor is now split into two buffers A blank mail message appears in the top buffer (called #compose), and the blank buffer where you were working remains in the bottom. After you send the message, the #compose buffer will disappear and you will be returned to the buffer you were working in.



#### Header for new mail message

Filling out a mail header

You fill out the mail header exactly as you did before. Because this is an imaginary scenario, you send the message to yourself instead of to a colleague.

- Move the pointer into the document editor window.
- ♦ Type in your own username in the To field. Press Return.

In the real world, you would enter the name of the real recipient.

## ♦ Type in the subject line as shown below.

Data for Project Saturn

The header should look like this:

### Filling out a mail header

You can leave the rest of the fields blank.

## ♦ Left click on OK to finish the header.

The dialog box disappears.

Entering the message

To enter the message, move the pointer inside the document editor and begin typing. The text will automatically appear beneath the mail header.

## ♦ Type in the message as it appears below:

Hi Jo, <RET>

I'm giving a presentation in a few days about how Project Saturn stacks up against its competitors. Do you have any data that I might be able to use? <RET>

Thanks for helping me out. <RET>

--Your name

When you are finished, it should look like this:



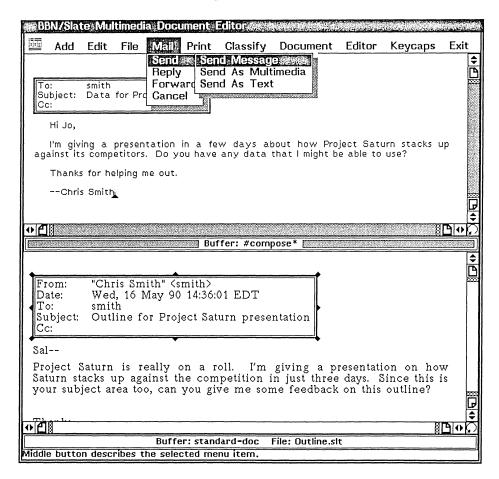
#### Typing in a mail message

When you are finished with the mail message, you can send it.

Sending the message

To send the message, you use the Mail-Send-Send Message option on the menu bar.

♦ Right hold on the Mail menu. Highlight the Send option, then the Send Message option. Release.



#### Sending a message

BBN/Slate sends the message and deletes the buffer from the screen. If BBN/Slate is unable to send the message, you will see an error message giving you the reason.

Saving your message

Before going on to the next section, save the comments that you made to the outline.

♦ Right hold on the File menu on the menu bar. Highlight Write, then drag right to highlight Same File. Release.

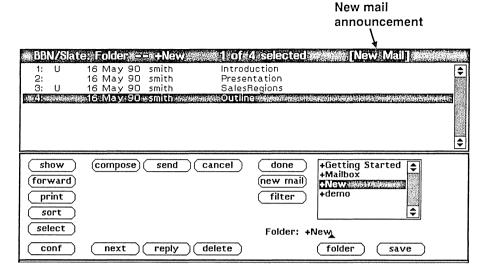
## Receiving Mail

During this session, you have sent two messages. Under normal working conditions, you would have sent these to other people. Because you are working with imaginary people, however, you sent these messages to yourself.

Now you'll take a look at these messages to see how you receive mail from other people.

Depending on how fast your system is, you've probably already received the first message that you sent earlier in this session. Every so often, the document manager checks to see if you have new mail. If you do, your system beeps, and BBN/Slate displays a [New Mail] announcement at the top of the document manager.

Look at your document manager to see if the announcement [New Mail] appears, as it does in the next figure.

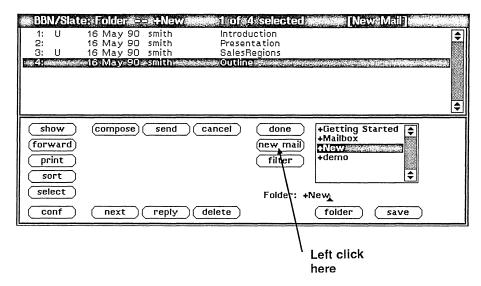


#### New Mail announcement

If you see this announcement, you can look at the messages that have just arrived.

Reading mail To read mail, you use the new mail button in the document manager.

♦ Left click on the new mail button.



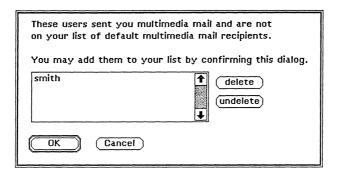
#### Using the new mail button

BBN/Slate switches you to your mailbox and checks to see whether you've received any new mail. If you have, the new mail appears in the document editor, where you can read it. If you haven't received any mail yet, you can read it later.



#### Reading new mail

At the same time, BBN/Slate displays the following dialog box.



Adding users to list of multimedia mail recipients

Whenever someone sends you multimedia mail for the first time, BBN/Slate asks whether to add the name of the sender to your list of multimedia mail recipients.

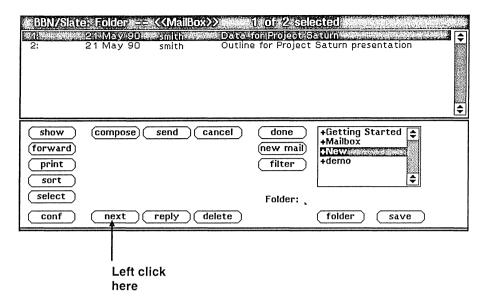
Because you sent yourself a multimedia message, the name in the dialog box is your username. Add yourself to the list by left clicking on the OK button.

#### ♦ Left click on the OK button.

Now read your mail. Use the icons in the vertical scroll bar to move through the document if you need to.

After you finish reading one piece of mail, you can read the next piece by using the next button.

#### ♦ Left click on the next button.



#### Displaying the next message

If you have another piece of mail, it appears in the document editor. BBN/Slate leaves the original message in the editor if you do not.

Reading your mail later

For various reason, you may read your mail later on in the tutorial while you are working in another file. When you click on the new mail button, your mail appears in the document editor and the buffer you were working in disappears. After reading the message, you can go back to your original buffer by using the Editor menu on the menu bar.

To return to the buffer you were working in, right hold on the Editor menu on the menu bar. Then drag down to highlight the Buffer option and highlight the Switch To option. Highlight the name of the original buffer and release.

Saving your messages

You don't have to do anything to save your mail messages. When you finish with BBN/Slate and exit the system, they will remain in

your mailbox. If you like, you can delete them from the document manager or move them to another folder as you did in Chapter 2. Make sure that you really want to delete any messages before using the delete button in the document manager.

After reading your mail, leave the messages in the editor and go on to the next chapter. If you want to exit from BBN/Slate and take a break, leave the system as described at the end of Chapter 2.

# What you've learned

In this chapter, you've made good progress toward getting your presentation prepared. You:

- sent a document with comments attached to it
- · composed and sent a new mail message
- read your mail

In the next chapter, you add spreadsheets and business graphs to your presentation materials.

# 5 Creating Spreadsheets and Business Graphs

In your last session, you sent a mail message to a colleague in Lisbon asking for financial information for your presentation. This colleague has been experimenting with BBN/Slate as well and has created a spreadsheet and bargraph for you from the data for Project Saturn.

Assume that you've prepared a new document, called Presentation, which follows the outline you created during your first session and which contains the spreadsheet and bargraph your colleague has sent you. During the company meeting, you plan to use Presentation as a handout. Now you want to change some values in the spreadsheet your colleague sent you and also create another one.

# During this session, you:

- · open a new file
- edit a spreadsheet and regenerate a bargarph
- create a new spreadsheet
- refine the new spreadsheet
- create a piechart from the new spreadsheet.

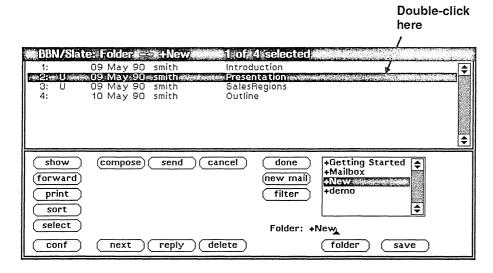
Before you begin

If you exited from BBN/Slate at the end of Chapter 4, re-enter the software as shown at the beginning of Chapter 3.

# Opening a new file

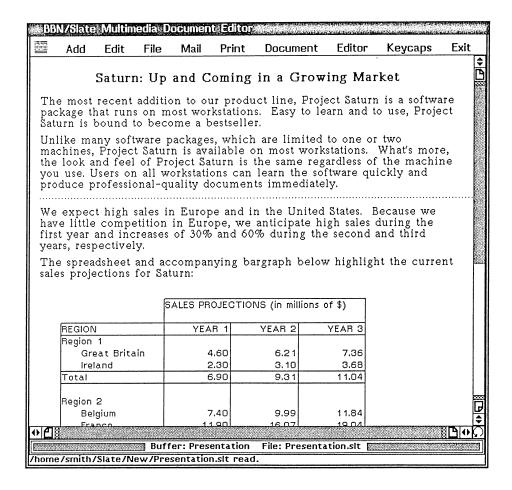
At the end of the last chapter, you were in your Mailbox. Switch to the folder +New and open the document called Presentation, the document you will hand out during your presentation.

- ♦ Using the left mouse button, double-click on the folder name +New.
- ♦ Double-click on the name Presentation.



#### Opening a new file

The new document appears in the document editor.



#### After opening a new file

# Editing a spreadsheet

The spreadsheet in this document contains formulas that calculate projected sales. You have just found out that one of these calculations is incorrect.

Changing a value

The incorrect number is the expected number of sales in Great Britain for Year 1, which is currently 4.60. You can find this number in the fifth row of the second column.

# ♦ Left click on the number 4.60.

•					<del></del>
_	Α	В	С	<u> </u>	
1		SALES PROJE	CTIONS (in mi	llions of \$)	
2			:	:	Left click
3	REGION	YEAR 1	YEAR 2	YEAR 3	here
4	Region 1				11010
5	Great Britain	4.60	6.21	7.36	l
6	Ireland	2.30	3.10	3.68	
7	Total	6.90	9.31	11.04	
8					
9	Region 2				
10	Belgium	7.40	9.99	11.84	
11	France	11.90	16.07	19.04	
12	Germany	21.00	28.35	33.60	
13	Luxembourg	3.00	4.05	4.80	
14	Netherlands	3.30	4.46	5.28	
15	Switzerland	7.20	9.72	11.52	
16	Total	53.80	72.63	86.08	
17					
18	Region 3				
19	ltaly	8.40	11.34	13.44	
20	Portugal	4.70	6.35	7.52	
21	Spain	11.50	15.53	18.40	
22	Total	24.60	33.21	39.36	
23					
	Region 4				
25	Denmark	5.50	7.43	8.80	*******
26	Finland	5.70	7.70	9.12	
27	Norway	8.90	12.02	14.24	
28	Sweden	10.20	13.77	16.32	
29	Total	30.30	40.91	48.48	

#### Selecting a cell

You have just clicked on cell B5. The cells in spreadsheets are numbered by column (identified by letter) and row (identified by number). Cell B5 is at the intersection of the second column (B) and the fifth row (5).

Notice that cell B5 is highlighted, or surrounded by a gray box, meaning that you can edit it. Edit the cell by typing in the new number, which is 20.6.

Enter the number 20.6 into the cell. Press Return.

After you press Return, the next cell down (B6) becomes highlighted. Notice that several of the numbers in the spreadsheet (those in cells C5, D5, B7-D7, B31-D31) changed. These numbers are based on formulas that depend on the value in B5. When you changed the value in B5, these numbers were recalculated automatically.

	A	В	С	D			
1	]	SALES PROJE	CTIONS (in mil	lions of \$)			
2			: 	: 			
3	REGION	YEAR 1	YEAR 2	YEAR 3			
4	Region 1						
5	Great Britain	20.60	27.81	32.96			
6	Ireland	2.30	3.10	3.68			
7	Total	22.90	30.92	36,64			
8	]						
9	Region 2						
10	Belgium	7.40	9.99	11.84			
11	France	11.90	16.07	19.04			
12	Germany	21.00	28.35	33.60			
13	Luxembourg	3.00	4.05	4.80			
14	Netherlands	3.30	4.46	5.28			
15	Switzerland	7.20	9.72	11.52			
16	Total	53.80	72.63	86.08			
17							
	Region 3						
19	ltaly	8.40	11.34	13.44			
20	Portugal	4.70	6.35	7.52			
21	Spain	11.50	15.53	18.40			
22	Total	24.60	33.21	39.36			
23							
24	Region 4						
25	Denmark	5.50	7.43	8.80			
26	Finland	5.70	7.70	9.12			
27	Norway	8.90	12.02	14.24			
28	Sweden	10.20	13.77	16.32			
29	Total	30.30	40.91	48.48			

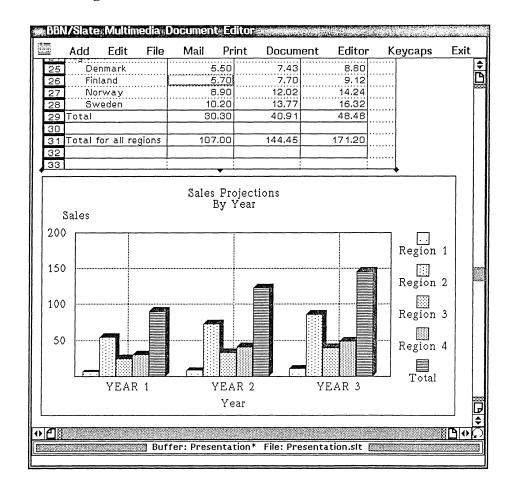
#### After editing a cell

Regenerating a graph

Your colleague generated the bargraph attached to this spreadsheet using the old values. Although the spreadsheet editor recalculates the values inside the spreadsheet automatically when you change a number, it does not automatically regenerate the attached bargraph.

Before regenerating the graph, scroll down a little so that you can see the bottom of the spreadsheet and the graph at the same time.

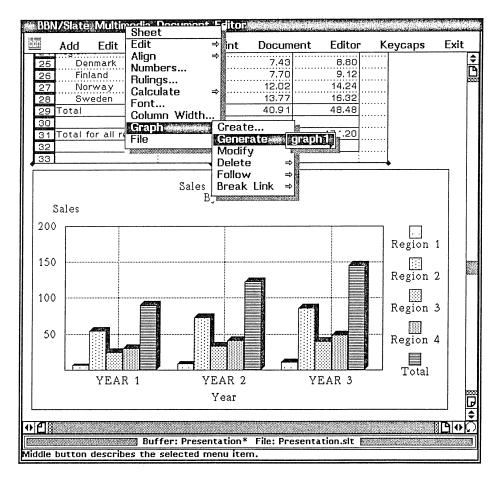
♦ Left click on either set of arrows until the screen looks something like this:



#### Scrolling down

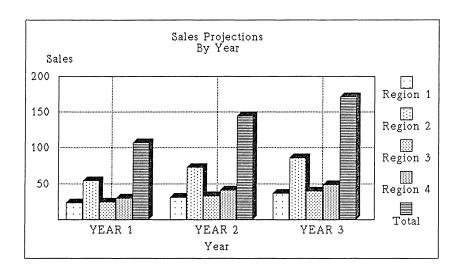
To regenerate the graph, you use the Graph-Generate option on the Sheet menu.

♦ Right hold inside the spreadsheet. Highlight the Graph option, then the Generate option, then the Graph1 option. Release.



#### Generating a graph

The graph changes to reflect the new projections.



After regenerating bargraph

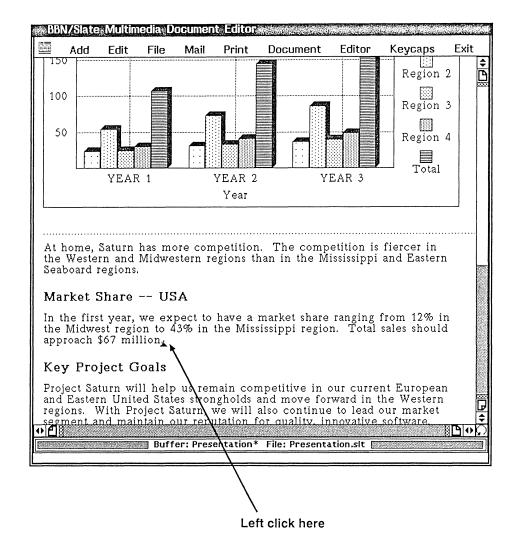
# Creating a spreadsheet

You decide to create another spreadsheet to show how much revenue you expect Project Saturn to generate in the United States.

Adding a spreadsheet

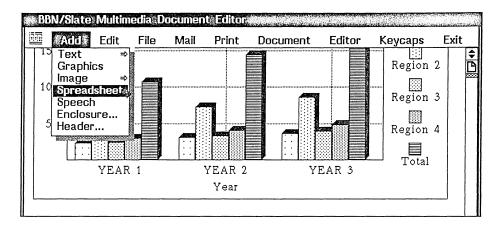
Left click on the arrows in the vertical scroll bar to move down through the document. Place your cursor after the paragraph ending "\$67 million."

♦ Left click after the paragraph ending "\$67 million."



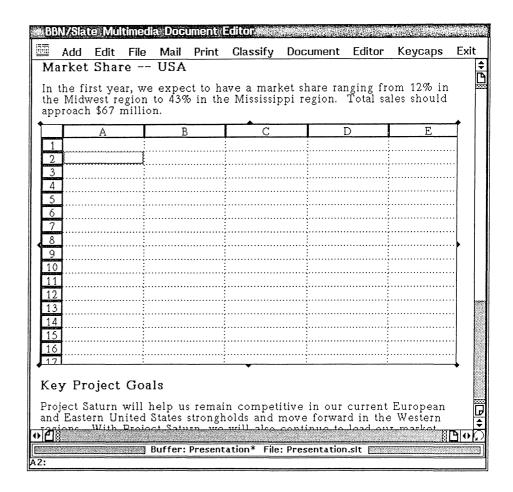
#### After positioning the cursor

♦ Left hold on the Add menu on the menu bar. Drag down to highlight the Spreadsheet option. Release.



#### Adding a spreadsheet

A blank spreadsheet appears after the paragraph. Notice that this time you used the left mouse button to select a menu from the menu bar. Use whichever button is more comfortable to you.



#### After adding a spreadsheet

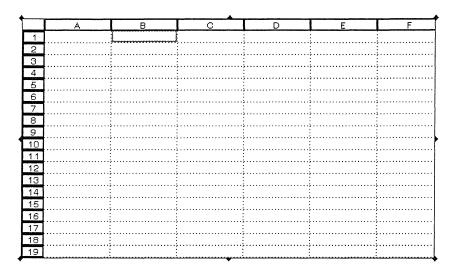
Entering labels

In this spreadsheet, you'll show the total market, the expected market share of Project Saturn, and the expected revenue. You show these categories as *labels* along the top of the spreadsheet. Labels are one of the three types of values you can use in BBN/Slate spreadsheets. The other types of values are numbers and formulas.

Begin the labels in the second column of the first row.

• Press TAB to move to the second column.

You have moved to cell B1. Notice that cell B1 is highlighted.



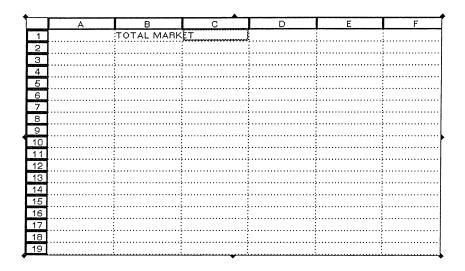
Moving to cell B1

# ♦ Enter the following label into cell B1:

TOTAL MARKET

# ♦ Press Tab.

The label is overflowing into the next cell. Don't worry about the overflow now — you will enlarge the cells in a minute.



Entering a label

# **Enter the following labels:**

MARKET SHARE <TAB>

EXPECTED REVENUE

# ♦ Press Return.

When you are finished, the labels will run into each other as in the following figure:

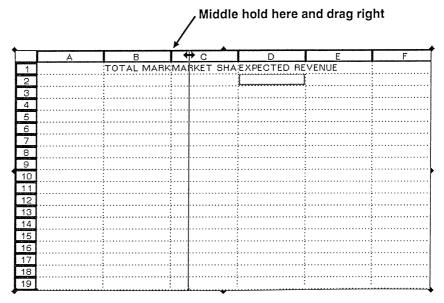
<b>-</b>						
	Α	B TOTAL MARK	C	D DECTED BE	E	F
		HOTAL MANN	WANKE I SHA	EVECTED UE	VENUE	
2		: }	;	J	;	
3		: ;		: ;		
4		: ;		; ;		
5		: ;		; ;	; ;	
6		: : :				
7						
8		:				
9						
10				,		
11				,		
12		:			:	
13						
14						
15						
16						
17	• • • • • • • • • • • • • • • • • • • •					
18						
19						
19			<del></del>			

# Spreadsheet with overflowing labels

# Enlarging cells

To enlarge the cells, you drag on the column boundaries using the middle mouse button.

- ♦ Select the spreadsheet by left clicking on it.
- ♦ Middle hold on the right boundary between the "B" and "C" labels.
- ♦ Drag the boundary right until you have enough room for all of the first label. Release.



#### Extending column boundaries

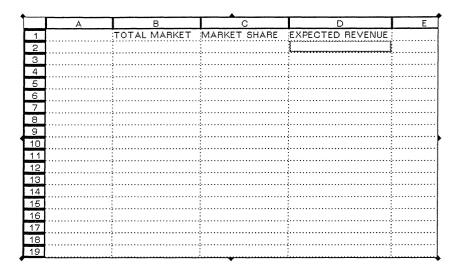
If you move the boundary too far to the right, you can move it back again. Extend the boundaries of column C and D in the same way.

- ♦ Middle hold on the right boundary of the cell containing "C."

  Drag right until you have enough room for the label. Release.
- ♦ Middle hold on the right boundary of the cell containing "D."

  Drag right until you have enough room for the label. Release.

The labels should now look something like the ones in the next figure.



# After extending column boundaries

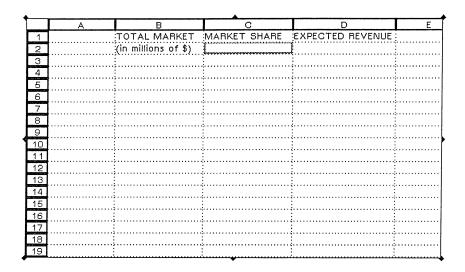
You can now continue to fill in the spreadsheet. First finish the labels on the top.

# $\Diamond$ Left click in cell B2. Enter the following label:

(in millions of \$)

# ♦ Press Tab.

The spreadsheet should look like the following one:



# Adding the second row of a label

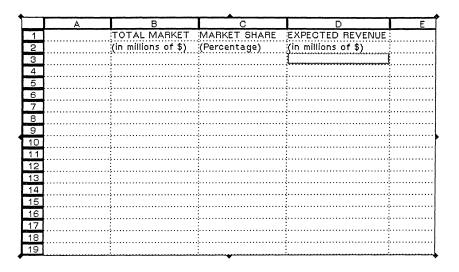
Complete the other two labels in the same way.

# **Enter the following labels:**

```
(Percentage) <TAB>
(in millions of $)
```

# ♦ Press Return.

When you are finished, the labels should look like the ones in the following figure.



#### After completing the second row of labels

Whenever you finish entering a value into a cell, be sure to press Tab or Return. Tab moves you to the next cell in the same row, and Return takes you to the next cell in the same column. If you left click on another cell before pressing Tab or Return, you will change the value of the current cell.

Now fill in the side labels.

♦ Left click on cell A3. Enter the following label:

Western

♦ Press Return.

	r				
_	A	В	С	D	E_
1				EXPECTED REVENUE	
2		(in millions of \$)	(Percentage)	(in millions of \$)	
З	Western				
4					
5			:		
6		,	·		
7		,	;		
8		,	;		
9					
10					
11					
12		,			
13		,			
14		,	,		
14 15		,			
16					
17					
18					
19					

# Adding a side label

Add the other side labels as shown in the next figure.

# $\Diamond$ Enter the following labels:

Midwestern <RET>

Central <RET>

E. Seaboard <RET>

TOTAL

♦ Press Return.

	I A	В	C	D	Е
1				EXPECTED REVENUE	
2		(in millions of \$)	(Percentage)	(in millions of \$)	: :
	Western				
4	Midwestern				
	Central	}			: :
_	E. Seaboard	: : }	: :	: ;	: :
_	TOTAL	: ;	: :	: {	: :
8		,	: ;	: {	: :
9		; ;	: :	: {	: :
10		; ;	: :	: {	: :
11		; ;	: :	: {	: :
12			: 5	:	: ;
13			: :	: :	: :
14			: :		: :
15					
16					
17					
18					:
19					

## After adding side labels

# Correcting mistakes

If you make a mistake, you can correct it by editing the contents of the cell.

First select the cell by left clicking on it. Then, left click after the letter or number you want to edit, and press the Delete key to delete the incorrect letters or numbers. Finally, type in the new letters or numbers and press Return.

#### Entering numbers

You can now begin entering the numerical data of the spreadsheet. Begin in cell B3 and work your way down columns B and C.

# ♦ Left click on cell B3. Enter the following numbers:

100 <RET>

63 <RET>

49 <RET>

85

#### Press Return.

	Α	В	С	D	E
1		TOTAL MARKET		EXPECTED REVENUE	
2		(in millions of \$)	(Percentage)	(in millions of \$)	
3	Western	100			
4	Midwestern	63			
	Central	49			
_	E. Seaboard	85			
7	TOTAL				
8	]				
9	]				
10					
11		;			
12		; ;			
13					
14					
15					
16					
17					
18					
19	L			<u> </u>	

# Entering numerical data in column B

When you get to the end of column B, be sure to press Return after the last cell. Then move to the top of column C and enter the data for that column.

- ♦ Left click on cell C3. Enter the following numbers.
  - .21 <RET>
  - .12 <RET>
  - .43 <RET>
  - .35
- ♦ Press Return.

	A	В	C C	D	F
1			<del></del>	EXPECTED REVENUE	
2		(in millions of \$)		(in millions of \$)	
	Western	100			
4	Midwestern	63	0.12	·	
5	Central	49	0.43		
	E. Seaboard	85	0.35		
_	TOTAL				
8		: ;			
9		: ;			
10		: ;			
11					· · · · · · · · · · · · · · · · · · ·
12					
13					
14					
15					
16 17					
18					
64.					
19	L				

# Entering numerical data in column C

## Entering formulas

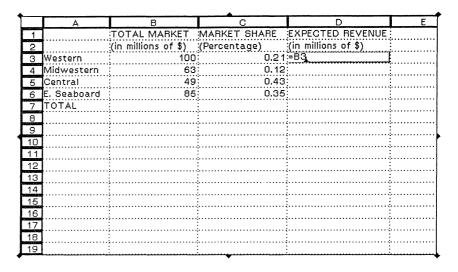
The values in column D are calculations based on columns B and C. You calculate these values using *formulas*.

First calculate the value of cell D3, then copy this formula into the rest of column D.

# $\Diamond$ Left click in cell D3. Enter an equals sign:

#### ♦ Left click in cell B3.

When you click in the cell, a reference to it appears in cell D3. As an alternative to clicking on cells, you can also type in the cell references in either upper- or lowercase.



Entering cell references

♦ Enter an asterisk:

♦ Left click in cell C3.

	Α	В	С	D	E
1				EXPECTED REVENUE	
2		(in millions of \$)	(Percentage)	(in millions of \$)	
3	Western	100	0.21	:=B3*C3	
4	Midwestern	63	0.12	<u>.</u>	
5	Central	49	0.43	į	
6	E. Seaboard	85	0.35	<u>:</u>	
7	TOTAL				
8					
9					
10				: : :	
11				: :	
12				: :	
13					
14					
15					
16					
17					
18					
19					

Adding a formula

The formula begins with an equals sign (=), which tells the spreadsheet to interpret the cell contents as a calculation. The spreadsheet editor interprets the formula =B3\*C3 as "the contents of cell B3 multiplied by the contents of cell C3."

#### Press Return.

After you press Return, the spreadsheet editor calculates the value from the formula and puts the value into the cell.

•					
<u></u>	Α	В	С	D	E
1				EXPECTED REVENUE	
2		(in millions of \$)	(Percentage)	(in millions of \$)	
3	Western	100	0.21	21	
4	Midwestern	63	0.12		
5	Central	49	0.43		
6	E. Seaboard	85	0.35		
7	TOTAL				
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18		,			
19					

#### After calculating a formula

You can use the formula you have already entered in cell D3 as a basis for the formulas in the rest of column D. You just highlight the cell containing the formula (in this case, D3) and drag down to highlight all the cells in column D. Then select the Fill Down option from the Edit menu.

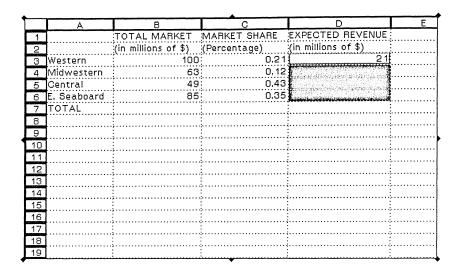
♦ Left hold on cell D3. Drag down to highlight cells D4 through D6. Release.

	А	В	С	D	E
1				EXPECTED REVENUE	
2		(in millions of \$)	(Percentage)	(in millions of \$)	
3	Western	100		21	
4	Midwestern	63			
	Central	49			
6	E. Seaboard	85	0,35	La companie de la co	
7	TOTAL				
8					
9					
10					
11		; ;			
12		; ;			
13		; ;			
14		;			
15		; ;			
16		; ,			
17		,			
18					
19		:			

# Highlighting multiple cells

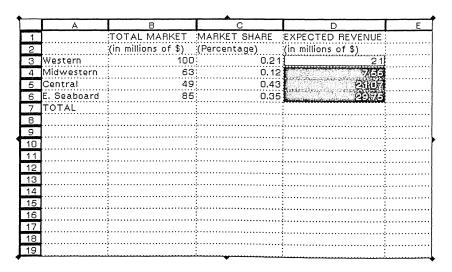
If you highlight too many cells, middle click to deselect the region, and then begin again. Notice that the first cell you highlighted, cell D3, still has the gray box around it. The other cells are highlighted in black.

♦ Right hold inside the spreadsheet to display the Sheet menu. Highlight the Edit option, then highlight the Fill Down option. Release.



# Duplicating a formula in a column

Values appear in cells D3 through D6.



Values calculated after duplicating a formula

There is one more value to calculate to complete this spreadsheet. Cell D7 is the total of cells D3 through D6. You calculate this number using a formula.

# ♦ Left click on cell D7. Enter the following formula.

=SUM(D3:D6)

The spreadsheet editor interprets this formula as "the sum of the values in cells D3 through D6." When you separate two values with a colon, as you did with D3 and D6, the spreadsheet editor calculates the values from those cells and all the cells in between. As a short cut, you could have clicked on cell D3 and dragged to cell D6 to enter the reference D3:D6.

<b>.</b>					
L	A	В	С	D	E_
				EXPECTED REVENUE	
2		(in millions of \$)	(Percentage)	(in millions of \$)	
3	Western	100	0.21	21	
4	Midwestern	63	0.12	7.56	
5	Central	49	0.43	21.07	
6	E. Seaboard	85	0.35	29.75	
7	TOTAL			=SUM(D3:D6)	
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					

#### Entering a formula

Press Return to calculate the value.

#### Press Return.

<b>-</b>					
L	Α	В	C	D	E
1		TOTAL MARKET		EXPECTED REVENUE	
2		(in millions of \$)	(Percentage)	(in millions of \$)	
3	Western	100	0.21	21	
4	Midwestern	63	0.12		
5	Central	49	0.43	21.07	
6	E. Seaboard	85	0.35	(	
7	TOTAL			79.38	
8					
9					
10					
11					
12		; ;			
13		; ;		:	
14					
15					
16					
17					
18					
19					

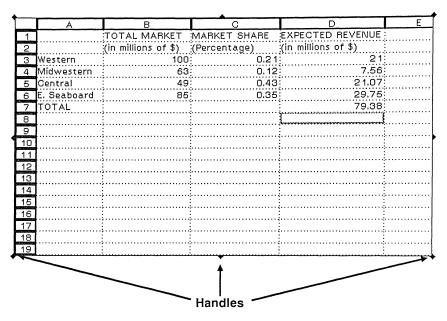
After calculating the value

# Refining the spreadsheet

After calculating the total expected revenue, you are finished with the content of the spreadsheet. Now refine it by resizing it and by adding lines, called *rulings*, to define the spreadsheet.

Resizing the spreadsheet

Your spreadsheet takes up less cells than the spreadsheet editor displays. You want to make it smaller, which you do by dragging the *handles* at the edges of the spreadsheet. The following figure shows the handles on the right side of the spreadsheet.



Spreadsheet handles

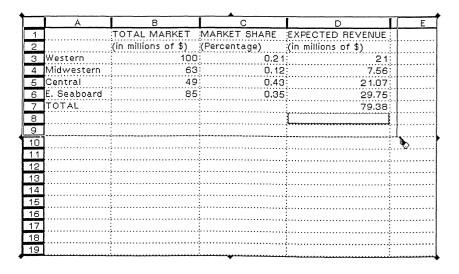
Resize the spreadsheet by left holding on the bottom right handle and dragging it.

♦ Left hold on the bottom right handle.

1			C	D	E
		2		EXPECTED REVENUE	
2		(in millions of \$)		(in millions of \$)	
	Western	100		(	
	Midwestern	63		(	
	Central	49		(	
	E. Seaboard	85	0.35	(	
	TOTAL	;		79.38	
8				<b></b>	
9					
10					
11		· 			
12 13					
14					
15	• • • • • • • • • • • • • • • • • • • •				
16		;			
17		; · · · · · · · · · · · · · · · · · · ·		:	
18					
19					
	************				ر

♦ Drag up and to the left until the spreadsheet is about the size of the one in the following figure.

When you drag on the handle, the cursor changes to a pointing hand:



Dragging a spreadsheet handle

When you are finished, the spreadsheet should look like this:

•								
L		Α	В	С	D			
	1		TOTAL MARKET	MARKET SHARE	EXPECTED REVENUE:			
	2		(in millions of \$)	(Percentage)	(in millions of \$)			
	3	Western	100	0,21	21			
L	4	Midwestern	63	0.12	7.56			
L	5	Central	49	0.43	21.07			
	6	E. Seaboard	85	0.35	29.75			
	7	TOTAL			79.38			
	8							
	9							

#### After resizing spreadsheet

Even though the spreadsheet looks smaller, you can still add data to the spreadsheet until it reaches its maximum size of 2048 rows by 256 columns.

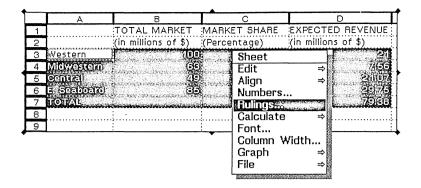
Adding rulings

When you left click outside the spreadsheet, you no longer see the grid and row and column numbers that you saw while editing it. To outline the rows and columns, you can add your own lines, or rulings, using the spreadsheet editor. These rulings appear both on your workstation screen and on paper.

To add rulings, you select the area you want to outline, select the type of outline you want, and apply it.

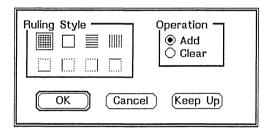
First put a boxed ruling around the main part of the spreadsheet.

- ♦ Left drag from cell A3 to D7.
- ♦ Right hold inside the spreadsheet. Highlight the Rulings option. Release.



# Selecting a region

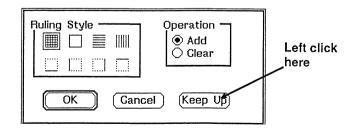
The following dialog box appears.



#### Rulings window

You want to keep the dialog box up while you work.

♦ Left click on the Keep Up button.

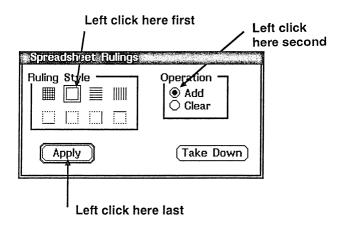


Keeping the ruling style dialog box up

The dialog box moves outside the document editor window, out of your way.

To surround the region you have highlighted with a box, use the box ruling style.

- **\rightarrow** Left click on the box ruling style.
- Left click on the Add button.
- Left click on the Apply button.



#### Adding a ruling

After you click on the Apply button, the spreadsheet editor applies the selected ruling to the highlighted area, as shown in the following figure. To see the rulings, deselect the spreadsheet by clicking outside the spreadsheet but still within the document editor.

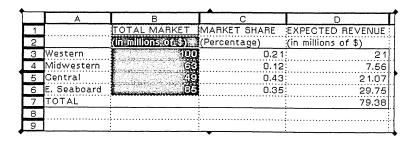
♦ Left click in another part of the document editor to see the ruling.

			EXPECTED REVENU
	(in millions of \$)	(Percentage)	(in millions of \$)
Western	100	0.21	2
Midwestern	63	0.12	7.5
Central	49	0.43	21.0
E. Seaboard	85	0.35	29.7
TOTAL			79.0

#### After adding ruling

Now define the columns using the same square ruling style.

- ♦ Left click on the spreadsheet to select it.
- ♦ Left drag from cell B1 to cell B6.



#### Selecting a column

Now apply the ruling. Because the square ruling style and Add operation are already selected, you only need to click on the Apply button.

# ♦ Left click on the Apply button.

When you left click outside the spreadsheet, it should look like this:

		MARKET SHARE	EXPECTED REVENU
	(in millions of \$)	(Percentage)	(in millions of \$)
Western	100	0.21	2
Midwestern	63	0.12	7.5
Central	49	0.43	21.0
E. Seaboard	85	0.35	29.7
TOTAL		•	79.3

## After applying ruling to column

Apply the same ruling style to columns C and D.

- ♦ Left drag from cell C1 to C6.
- ♦ Left click on the Apply button.
- ♦ Left drag from cell D1 to D6.
- ♦ Left click on the Apply button.

When you are finished, left click outside the spreadsheet. It should look like the one in the next figure:

			EXPECTED REVENU
	(in millions of \$)	(Percentage)	(in millions of \$)
Western	100	0,21	2
Midwestern	63	0.12	7.5
Central	49	0.43	2 1.0
E. Seaboard	85	0.35	29.7
TOTAL			79.3

## After adding rulings to columns

You need to add one more ruling to make the spreadsheet complete.

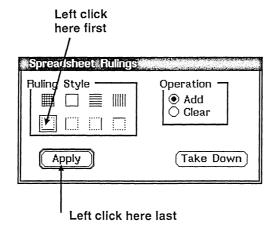
♦ Left click on cell A6.

L	Α	ВВ	C	D
1		TOTAL MARKET		EXPECTED REVENUE
2		(in millions of \$)	(Percentage)	(in millions of \$)
3	Western	100	0.21	21
4	Midwestern	63	0.12	7.56
5	Central	49	0.43	21.07
6	E. Seaboard	85	0.35	29.75
7	TOTAL			79.38
8				
9				

Selecting a cell

Now choose the underscore ruling style.

- Left click on the underscore ruling style.
- ♦ Left click on the Apply button.



Applying an underscore ruling

When you left click outside the spreadsheet area, your spreadsheet should look like this:

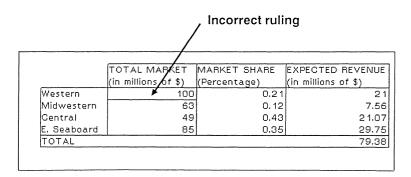
	TOTAL MARKET		EXPECTED REVENU
	(in millions of \$)	(Percentage)	(in millions of \$)
Western	100	0.21	2
Midwestern	63	0.12	7.5
Central	49	0.43	21.0
E. Seaboard	85	0.35	29.7
TOTAL			79.3

### Spreadsheet complete with rulings

Correcting mistakes

If your spreadsheet doesn't look quite as it should, you can remove rulings the same way that you added them.

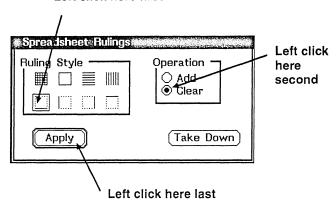
For instance, if you had an underscore ruling in cell B3, you could remove it using the Clear button in the rulings dialog box.



#### Incorrect ruling

To clear the incorrect ruling, first left click on cell B3. Next, left click on the underscore ruling in the dialog box. Then, left click on the Clear button and on the Apply button in the dialog box.

#### Left click here first



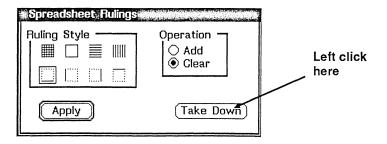
## Removing rulings

When you click outside the spreadsheet, the ruling will be gone.

Taking down the rulings dialog box

You are finished with the rulings dialog box, so you can take it down.

♦ Left click on the Take Down button on the Spreadsheet Rulings dialog box.



Taking down the rulings dialog box

The dialog box disappears.

Removing the outline

Spreadsheets, by default, appear with outlines when you left click outside them. To have the spreadsheet appear without the outline, use the Change Attributes option on the Edit menu.

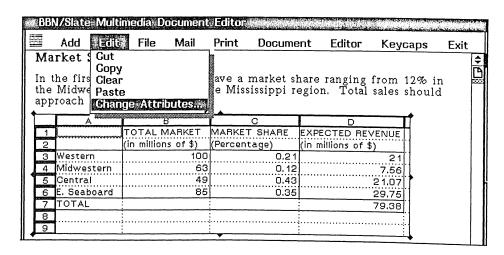
♦ Left click on the spreadsheet to select it.

	А	В	С	D
1		TOTAL MARKET	MARKET SHARE	EXPECTED REVENUE
2		(in millions of \$)	(Percentage)	(in millions of \$)
3	Western	100	0.21	21
4	Midwestern	63	0.12	7.56
5	Central	49	0.43	21.07
6	E. Seaboard	85	0.35	29.75
7	TOTAL			79.38
8				
9				

Selecting the spreadsheet

Now select the Change Attributes option.

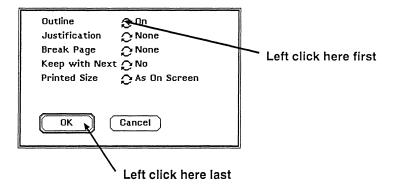
♦ Right hold on the Edit menu on the menu bar. Highlight Change Attributes. Release.



## Changing attributes

When the dialog box appears, click on the cycle button beside Outline. Then click on OK.

- Left click on the cycle button beside Outline.
- ♦ Left click on OK.



## Selecting no outline

When you left click outside the spreadsheet, it should look like this:

	TOTAL MARKET	MARKET SHARE	EXPECTED REVENUE
	(in millions of \$)	(Percentage)	(in millions of \$)
Western	100	0.21	21
Midwestern	63	0.12	7.56
Central	49	0.43	21.07
E. Seaboard	85	0.35	29.75
TOTAL			79.38

Spreadsheet without outline

# Creating a piechart

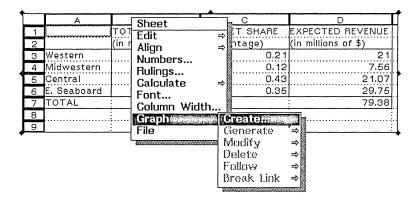
Spreadsheets present information in rows and columns. Sometimes analyzing data is easier if you can translate these rows and columns into graphs.

You can create bargraphs, piecharts, and line graphs from spreadsheets. Since piecharts are good for showing percentages, you decide to make a piechart showing the percentage of revenue contributed by each region.

Creating a graph

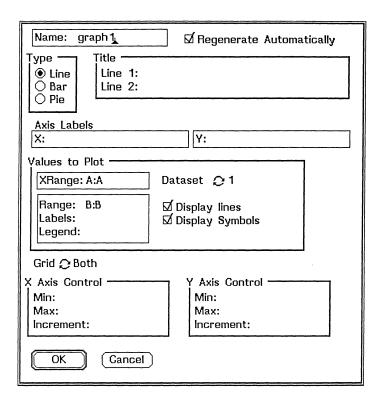
To make a piechart, you select the Graph-Create option on the Sheet menu and fill in the information that BBN/Slate needs to create the graph.

♦ Right hold inside the spreadsheet. Highlight the Graph option, then highlight the Create option. Release.



#### Creating a graph

The following dialog box appears.



Dialog box for creating graphs

Defining the graph type and title

BBN/Slate uses the values you enter here to make the graph from your spreadsheet. Begin by defining the graph as a piechart and giving it a title.

- ♦ Left click on the button beside Pie.
- ♦ Left click in the Line 1 field. Enter the following:

Percentage of Revenue <RET>
By Region

Left click here Enter the title here Name graph 1 ☑ Regenerate Automatically Туре Title Line 1: Percentage of Revenue ○/Line Bar Line 2: By Region Pie Axis Labels Y: X: Values to Plot XRange: A:A Dataset 😂 1 Range: B:B ☑ Display lines Labels: ☑ Display Symbols Legend: Grid 😂 Both X Axis Control Y Axis Control Min: Min: Max: Max: Increment: Increment:

The dialog box should look like this:

Entering graph type and title

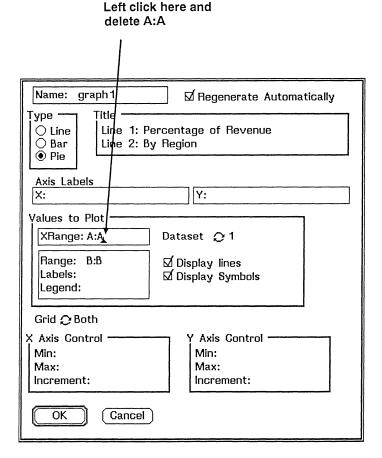
Cancel

OK

Defining values to graph

Continue to define the graph by telling BBN/Slate which values to use for the piechart. Since you are showing the percentage of revenue by region, you graph columns A (region) and D (revenue) as the *XRange*. First, delete the default XRange of A:A.

- ♦ Left click after A:A in the XRange field.
- Press the Backspace key three times to delete A:A.



#### Deleting the existing XRange

In a piechart, BBN/Slate uses the XRange to define the slices of the pie. You want the four portions to reflect the four regions, so you define the XRange as A3:A6. (Remember that cells A3 through A6 contain the labels Western, Midwestern, Central, and E. Seaboard.)

# **Enter the following:**

A3:A6 <RET>

The cursor moves to the next field.

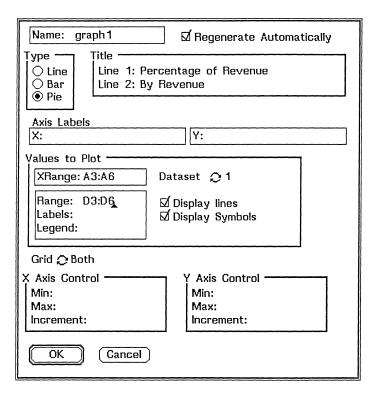
Name: graph1 ☑ Regenerate Automatically
Type Title  C Line Bar Pie Pie
Axis Labels X: Y:
Values to Plot
XRange: A3:A6 Dataset 2:1
Range: B:B⊾ ☑ Display lines Labels: ☑ Display Symbols Legend:
Grid ⊋ Both
X Axis Control  Min:  Max:  Increment:  X Axis Control  Min:  Max:  Increment:
OK Cancel

## Moving to the next field

You have moved into the Range field. BBN/Slate uses the data in the Range field to calculate the proportions of the pie. You want to base the proportions on actual revenue as shown in cells D3 through D6.

- ♦ Press the Backspace key three times to delete B:B.
- ♦ Enter the following:

D3:D6

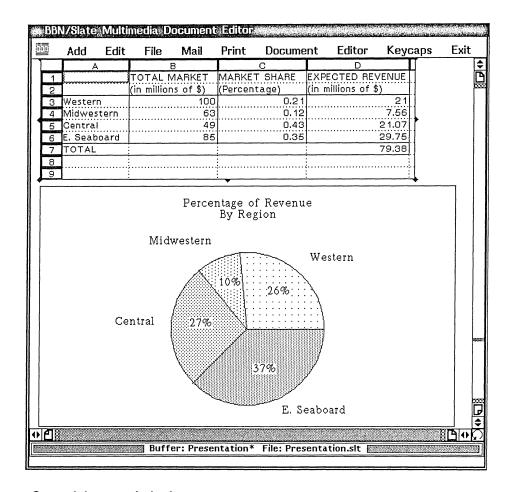


## Entering the Range values

This is all the information BBN/Slate needs to generate the piechart.

#### ♦ Left click on the OK button.

When you select OK, BBN/Slate generates the piechart and places it below your spreadsheet. It should look like the one in the following figure:



#### Spreadsheet and piechart

The piechart you have created is linked to the spreadsheet until you explicitly break the link between them. When you break the link, you can no longer alter the graph from the Sheet menu.

The piechart is a graphic that you can edit using the BBN/Slate graphics editor, explained in the next chapter. If you make any changes to the piechart, these changes are not reflected in the spreadsheet.

Saving your document

Save your presentation so that you'll be ready to work in the next chapter. In addition to saving by selecting options from the menu bar, you can also use the keyboard.

- ♦ Hold down the Control key.
- ♦ Press X, then S.

BBN/Slate saves your document. For more information on using other keyboard shortcuts, see the *Customizing Manual*.

If you want to exit BBN/Slate and rest before going on to the next chapter, follow the instructions at the end of Chapter 2.

# What you've learned

In this chapter, you have:

- · changed a value in a spreadsheet
- regenerated a bargraph
- created and refined a spreadsheet
- · created a piechart based on a spreadsheet

As well as learning specifically about spreadsheets, you are also becoming acquainted with BBN/Slate's multimedia format. This format lets you move to and from the media types most appropriate to the information you want to convey.

In this next chapter, you add graphics and images to your presentation.

# 6 Creating Graphics and Images

Your presentation materials are coming along nicely. You have good-looking text that will work well as a handout, and you have a couple of spreadsheets and business graphs that reflect how Project Saturn stands up to the competition.

You have found an image that will work well as a logo for the project — a scanned image of Saturn. In this chapter, you add this to the presentation materials.

You'll also add to the materials a map that one of your colleagues sent you through multimedia mail. This map shows the expected sales of Project Saturn in the United States. After adding the map, you edit it by adding a key that names each region.

During this session, you work with *images* and *graphics*. An image is a black and white representation of a photograph, drawing, or screen display. You can import images from the file system, capture them from your workstation screen, or create them yourself using the BBN/Slate image editor.

Graphics are drawings composed of lines, geometric figures, text, and textures. You can also include images within graphics.

How are images and graphics different? When creating graphics, you can edit objects (such as text, lines, or shapes) separately. By contrast, you work with an image as a single unit. For instance, if you add a line to an image, it becomes an integral part of the image. You can edit the line only by also editing the part of the image surrounding it.

In this session, you:

- add an image from the file system
- add a graphic from another BBN/Slate document
- edit the graphic

Before you begin

Make sure that the document Presentation still appears in the document editor. If you took a break after the last chapter and exited the software, re-enter before beginning this chapter. Then open the +New folder and the Presentation document.

# Adding images from the file system

You can import into a BBN/Slate document images that exist in your file system. You may have scanned these images in yourself, or you may have received them from other people or created them in other software packages.

Adding the image

The image of Saturn is in the +Getting Started folder. You can move to this folder without disturbing the document currently in the document editor by double-clicking on its name in the folder list.

♦ Using the left mouse button, double-click on the folder name +Getting Started.

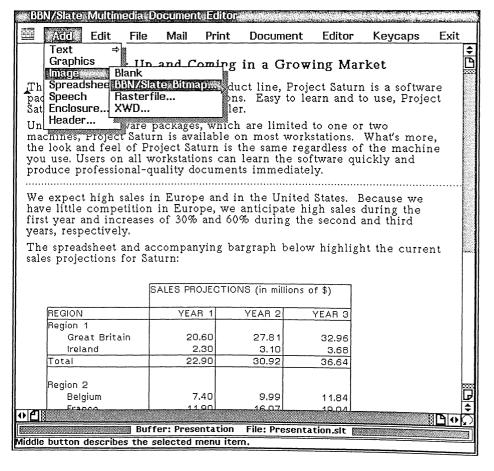
Your presentation is still in the document editor, but your current folder is +Getting Started. Notice that the document listing doesn't contain anything named Saturn. This is because the list contains only BBN/Slate documents, and the image you are adding is not yet in BBN/Slate format.

Before you add the image, decide where to place it in the Presentation document and place the cursor there.

♦ Move to the beginning of the document. Left click at the beginning of the first paragraph.

To add the image, you use the Image-BBN/Slate Bitmap option on the Add menu.

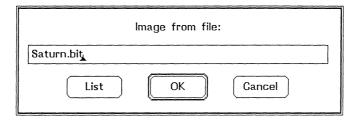
♦ Right hold on the Add menu on the menu bar. Highlight the Image option. Highlight the BBN/Slate Bitmap option. Release.



Adding an image from a file

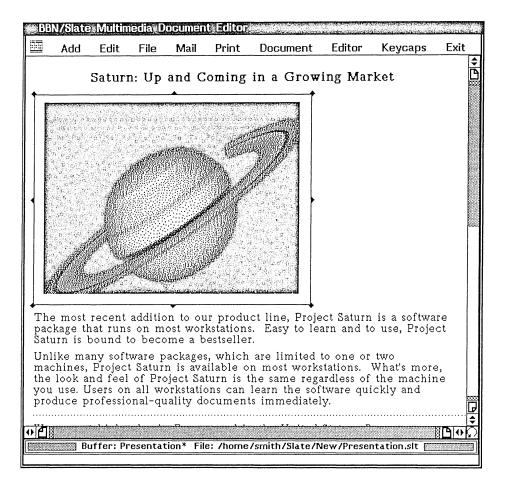
A dialog box appears. You enter the name of the file containing the image, which in this case is Saturn.bit.

♦ Type Saturn.bit in the dialog box. Left click on OK.



Specifying the file containing the image

The Saturn image appears at the beginning of your document.

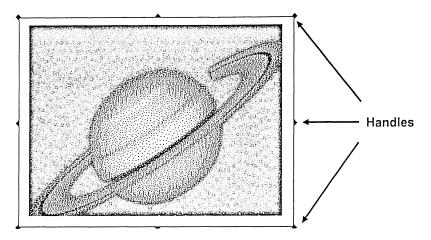


#### Document with image added from file

Changing image attributes

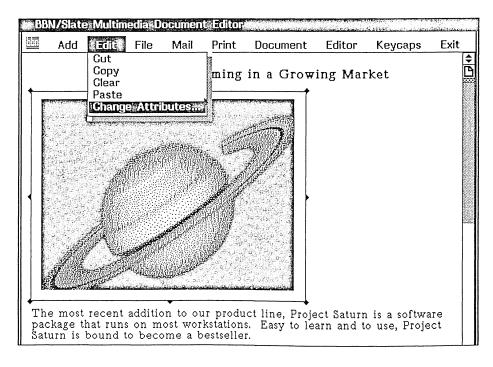
To center the image between the margins and remove the border from the outside, you select the Change Attributes option from the Edit menu.

Before changing the attributes, make sure the image is selected. You can tell if an image is selected because of the handles that appear around the outside. If you don't see these handles, left click on the image to select it.



Handles on an image

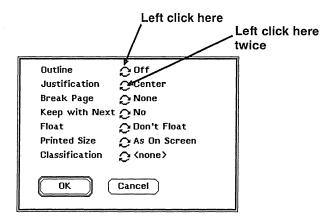
♦ Right hold on the Edit menu on the menu bar. Drag down to highlight the Change Attributes option. Release.



Changing image attributes

You see a dialog box that lets you change the way the image looks on your screen or on the printed page. To change the outline and the justification of the image, you use the cycle button beside the words Outline and Justification.

- ♦ Left click on the cycle button beside Outline.
- ♦ Left click twice on the cycle button beside Justification.
- ♦ Left click on OK.



#### Changing the image outline and justification

When you clicked on the cycle buttons, you changed the attributes of the image. As you probably noticed when you clicked on the Justification switch, this attribute has several possible values.

After you click on OK, the image moves to the middle of the screen. If you click outside the image, the box around Saturn disappears.

**Left click outside the image area.** 

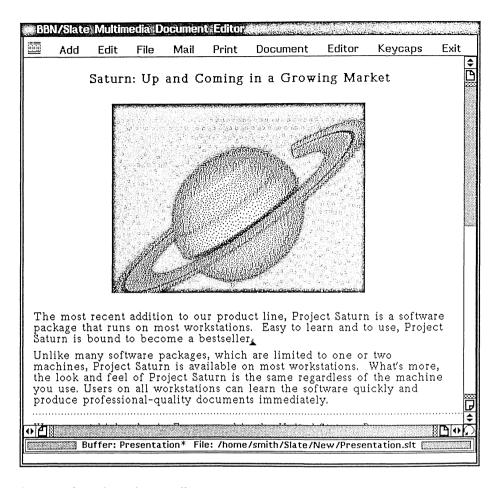


Image after changing attributes

# Adding a graphic from a BBN/Slate document

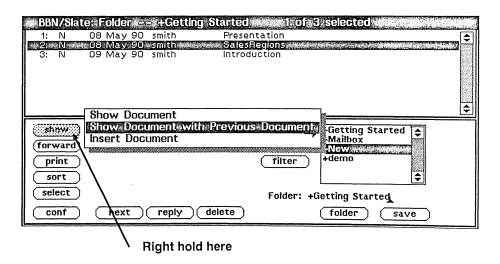
In addition to adding images from the file system, you can paste images, or in this case graphics, from other BBN/Slate documents. One of your colleagues has sent you a mail message containing a map that shows sales areas in the United States. When you received this map, you stored it in a separate file. You decide to copy this graphic from the file and paste it into your presentation.

To copy this map, you open up the file, copy the graphic, and paste it into your presentation.

Opening two documents at once

Open the document containing the map and show it in the document editor.

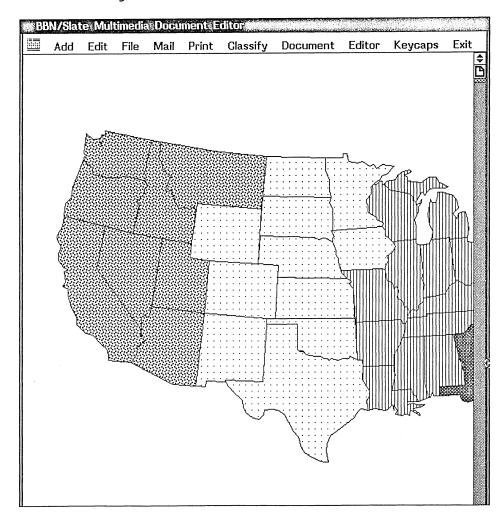
- ♦ Double-click on the name +New.
- ♦ Left click once on the name SalesRegions.
- ♦ Right hold on the show button. Highlight the Show Document with Previous Document option. Release.



#### Opening two documents at once

When you open multiple files, BBN/Slate keeps them in separate buffers. Picture the buffers in layers in the document editor, with the document you most recently opened on top. You can see only the buffer on top.

BBN/Slate displays the map in the document editor. Your Presentation file is still in the editor, but in a layer beneath the SalesRegions buffer.



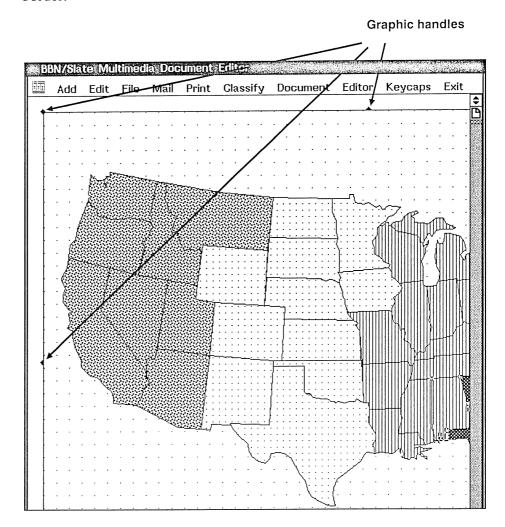
## File containing graphic

Copying a graphic

To get the graphic from the first file into your presentation, you copy it, go back to the presentation file, and paste it.

♦ Left click inside the graphic to select it.

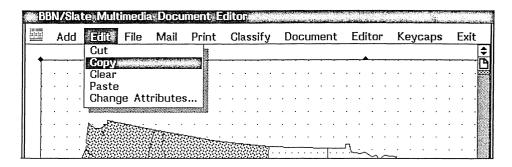
Graphics, like images and spreadsheets, have handles. When you have selected a graphic, you can see its handles around the outside border.



Selected graphic with handles

After you select the graphic, you copy it by selecting Copy from the Edit menu on the menu bar.

♦ Right hold on the Edit menu. Highlight the Copy option. Release.

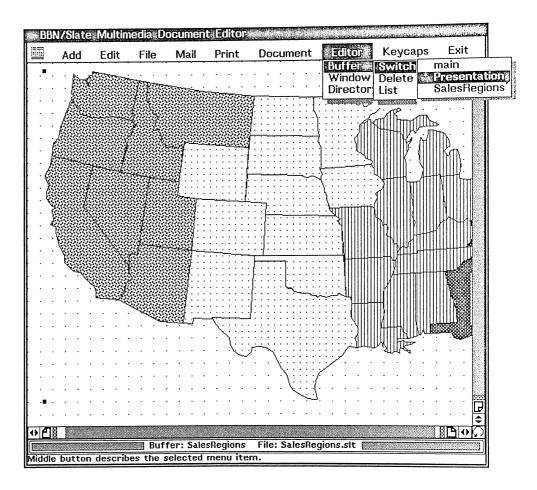


Copying a selected graphic

Pasting a graphic

Now that you've copied the graphic, you need to move to the Presentation file. Because you already have this file open, you simply move between buffers.

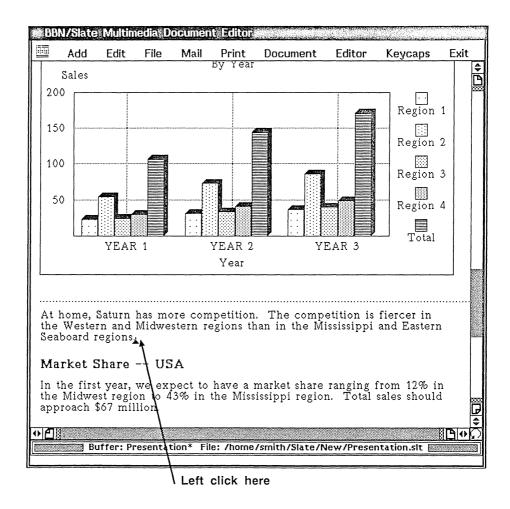
♦ Right hold on the Editor menu. Highlight the Buffer option, then highlight the Switch To option. Select Presentation. Release.



## Switching to another file

The Presentation buffer now moves to the front of the document editor, and the SalesRegions buffer moves further back. You want to place the map of sales regions at the end of the paragraph ending "Eastern Seaboard regions." First move there using the vertical scroll bar.

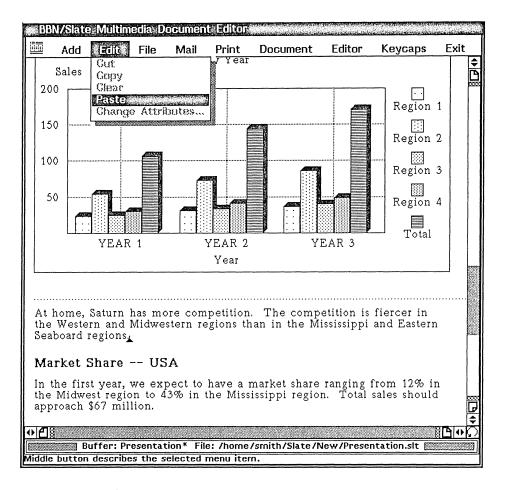
♦ Left click after the paragraph ending "Eastern Seaboard regions."



## Moving to the end of the document

Now paste the map by selecting Paste from the Edit menu on the menu bar.

♦ Right hold on the Edit menu. Drag down to select Paste. Release.



## Pasting into a file

The map now appears in your presentation.

# Editing a graphic

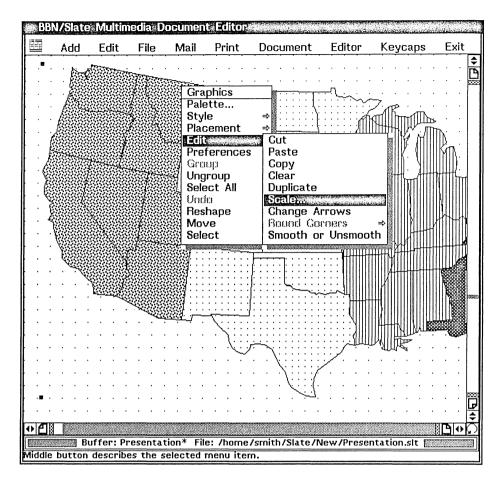
The map of the United States that you just pasted into your document needs a key and a title. You can add them easily using the graphics editor.

Before you begin, resize the graphic so that it fits easily between your margins. Then create the key by drawing and filling rectangles that correspond to the sales regions on the map and adding explanatory labels. Finally, add a title to the entire graphic.

## Resizing a graphic

To resize a graphic, you use the Edit-Scale option on the Graphics menu.

- ♦ Left click on the map to select it.
- ♦ Right hold to display the Graphics menu. Highlight the Scale option. Release.

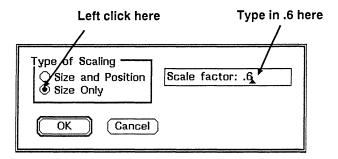


## Selecting the entire graphic

A dialog box appears. Scale the figure to 60% of its original size.

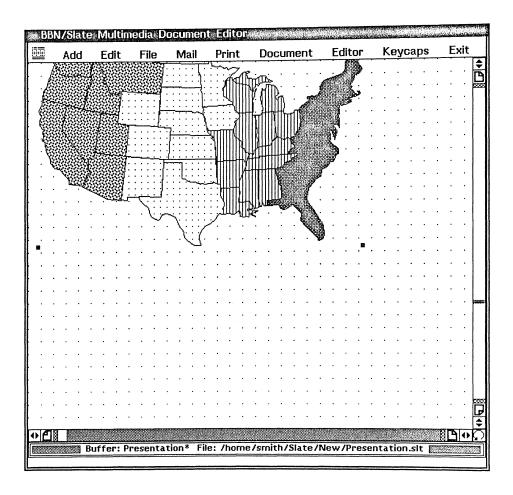
- ♦ Left click on the Size Only button.
- ♦ Type in .6 in the scale factor field:

.6 <RETURN>



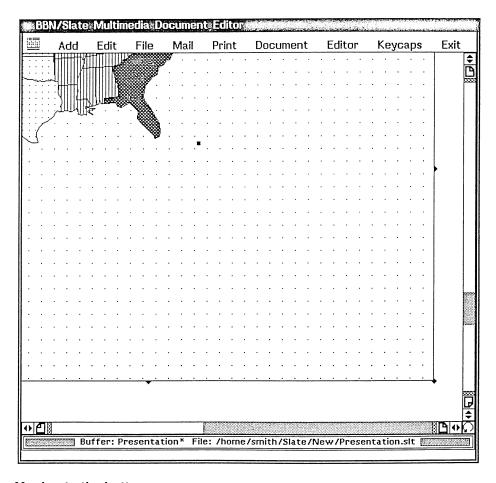
Scaling a graphic

In many dialog boxes, pressing Return is the same as clicking on the OK button. After you press Return, BBN/Slate resizes the map and leaves the border the same size.



## After resizing the graphic

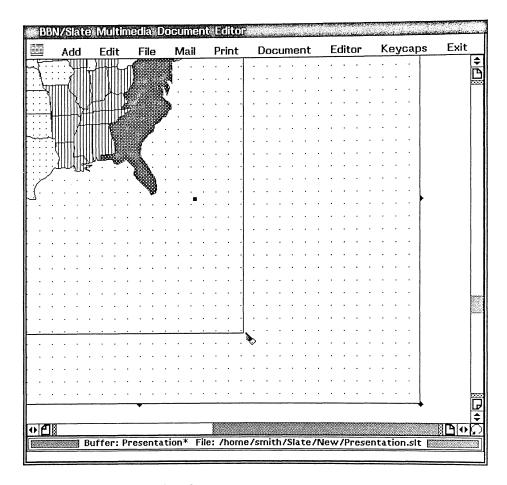
You can resize the border by dragging on a corner handle. First use the scroll bar to move down and to the right until you see the bottom corner handle, as in the following figure.



## Moving to the bottom corner

Now drag the handle up and to the left. Leave some room underneath the map so that you can add the key at the bottom.

- ♦ Left hold on the bottom right handle.
- **†** Drag up and left until the graphic looks like the one in the following figure.



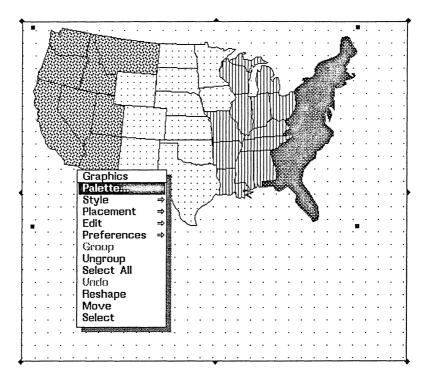
# Resizing the graphics border

After resizing the border, move up and to the left until you see the entire map in the document editor.

Drawing an object

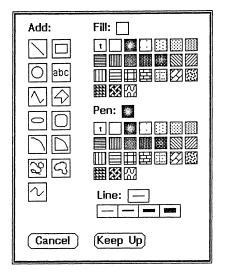
To draw a rectangle, you use the rectangle tool on the *graphics* palette. Bring up the graphics palette by selecting Palette from the Graphics menu.

Palette. Release.



Selecting the graphics palette

The graphics palette appears overlaid on the graphic.



## The graphics palette

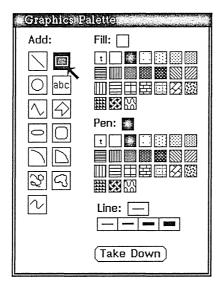
You want to keep the palette up while you work, so you click on the Keep Up button.

## ♦ Left click on the Keep Up button.

The palette moves out of your way. To draw, you select items from the palette and then use them within the graphics box.

Start the key by creating a rectangle.

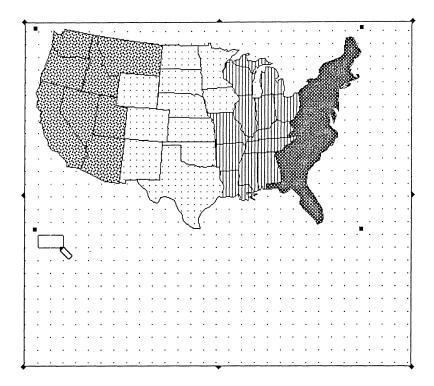
♦ Left click on the rectangle icon on the graphics palette.



Selecting the rectangle icon

The icon dims to show that you can draw a rectangle within the graphics region. When you move into the graphics region, the cursor changes to a pencil.

♦ Left hold inside the graphics region. Drag right and down until you create a rectangle about the size of the one in the next figure. Release.



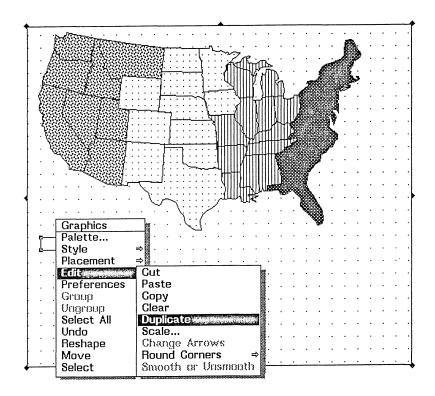
## Drawing a rectangle

Notice that the graphics editor automatically lines the rectangle up with the dotted lines on the background of the graphic, called the *graphics grid*. With *grid mode* turned on, you can easily create and place the rectangle accurately. To have more control over where you place objects, you can turn grid mode off.

Duplicating an object

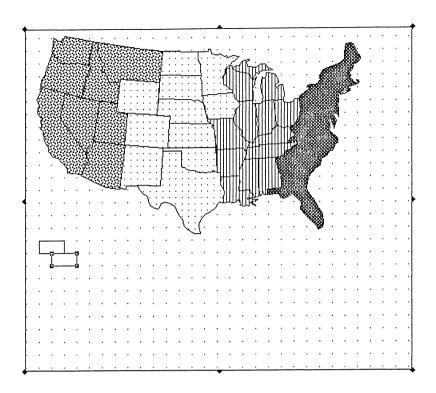
Because the map contains four regions, you create four rectangles for the key. Instead of drawing four separate boxes, you use the Duplicate option on the Graphics-Edit menu.

- ♦ Left click on the rectangle to select it.
- ♦ Right hold anywhere inside the graphic to display the Graphics menu. Highlight Edit, and then drag right to highlight Duplicate. Release.



Duplicating the rectangle

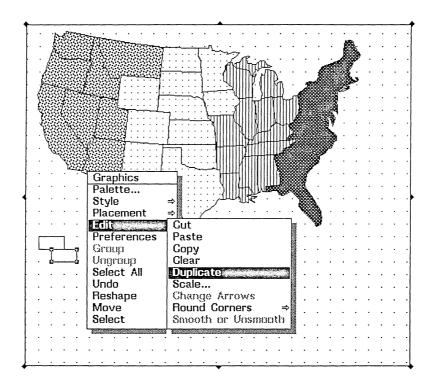
The duplicated rectangle appears on top of the original rectangle.



## Duplicated rectangle

Create the other two rectangles in the same way.

- ♦ Left click on either rectangle to select it.
- Right hold inside the graphic. Highlight Edit, and then highlight Duplicate. Release.

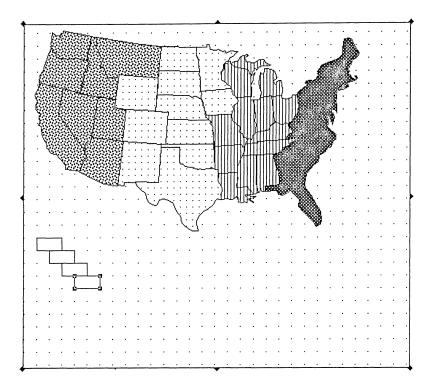


Duplicating the rectangle again

To create the final rectangle, select the Duplicate option once more.

Pright hold inside the graphic. Highlight Edit, and then highlight Duplicate. Release.

You have created four rectangles.

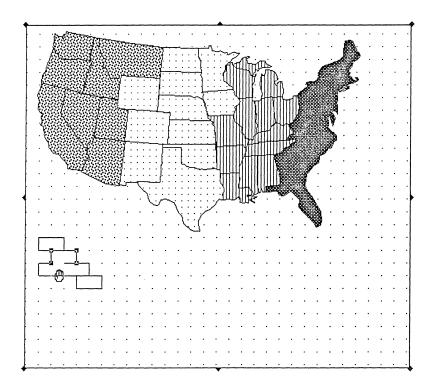


## **Duplicated rectangles**

Positioning objects

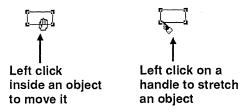
After creating the four rectangles that will make up the map key, you position them. With grid mode turned on, positioning objects is easy.

♦ Left hold in the middle of the second rectangle. Move the rectangle until it is lined up roughly as shown in the following figure.



## Positioning the rectangles

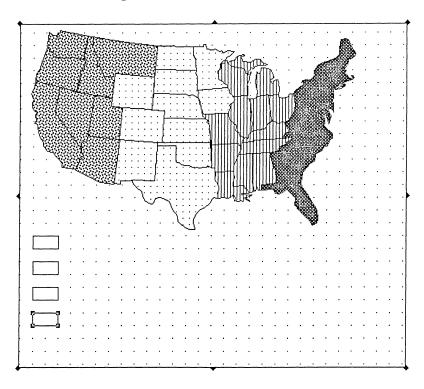
When you left click on an object away from any of the graphics handles, you see an upright hand on top of the object. This hand is your signal that when you move the cursor, you will move the object. If you click on any of the graphics handles, you see a pointing hand. If you move the cursor when you see the pointing hand, you will stretch the object instead of moving it.



Moving vs. stretching an object

Now position the other third and fourth rectangles using the same method.

♦ Left hold inside each of the third and fourth rectangles. Drag them into the positions shown in the following figure.



#### Aligning rectangles

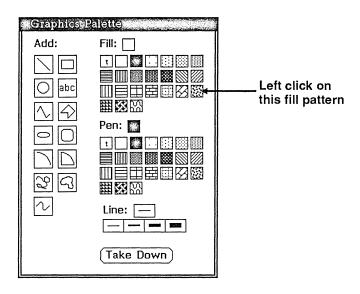
Because you have grid mode turned on, the rectangles align easily with each other.

Filling in objects

The next step in making the map key is to fill in each rectangle with the pattern of its corresponding region on the map. To fill in objects, you select the object, then use the fill icons on the graphics palette.

♦ Left click on the first rectangle to select it.

♦ Left click on the fill pattern in the graphics palette that matches the western-most region on the map.



#### Selecting a fill pattern

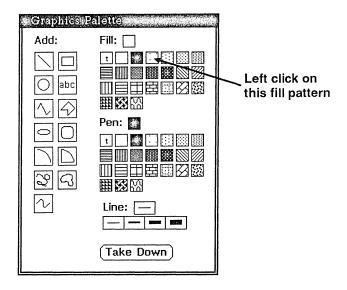
The pattern appears in the selected rectangle.



#### Filled rectangle

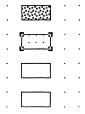
Fill in the other three rectangles in the same way.

- ♦ Left click on the second rectangle to select it.
- ♦ Left click on the fill pattern in the graphics palette as shown in the following figure.



## Selecting a second fill pattern

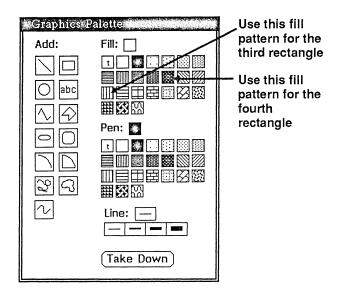
This fill pattern appears in the second rectangle.



## Filling the second rectangle

Fill the remaining two rectangles with the patterns shown in the next figure.

- **Select each of the remaining rectangles in turn.**
- ♦ Fill each rectangle in turn.



## Filling the third and fourth rectangles

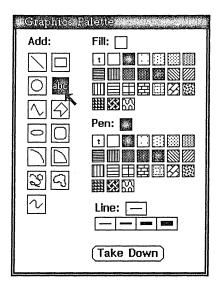
When you are finished, the rectangles should look like the ones in the figure below.

#### Filled rectangles

Adding text to a graphic

To finish the key, you add explanatory text beside the rectangles to indicate the region each pattern refers to.

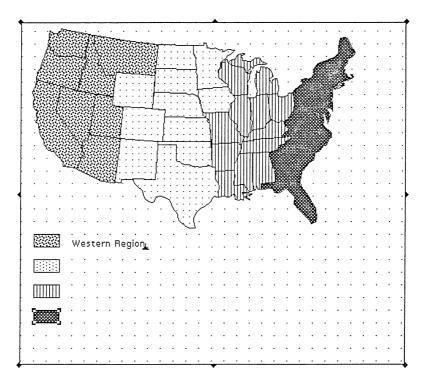
♦ Left click on the text icon on the graphics palette.



Selecting the text icon

The text icon dims to show that you can add text to the graphic.

- ♦ Position the cursor beside the first rectangle and left click.
- ♦ Enter the text as shown in the following figure.



#### Entering text

Instead of pressing Return at the end of the line of text, you select the text icon again and begin a separate block of text for the next label. By creating each label separately, you can move and edit them separately.

Create the next three labels by first selecting the text icon and then entering the text.

- ♦ Left click on the text icon on the graphics palette.
- ♦ Left click beside the second rectangle.
- **The Enter the following text:**

Midwestern Region

Continue to label the rectangles.

- ♦ Left click on the text icon.
- ♦ Left click beside the third rectangle.
- **†** Enter the following text:

Central Region

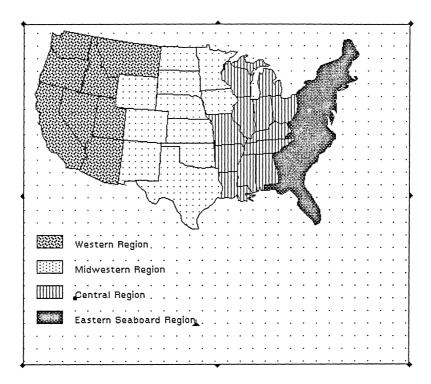
	Western Region				•				
[111111]							٠		
ппппп				٠					
	Central Region		٠				٠	٠	
55555555						٠	٠		
2000000								•	٠

Add the final label.

- **♦** Left click on the text icon on the graphics palette.
- ♦ Left click beside the last rectangle.
- **©** Enter the following text:

Eastern Seaboard Region

When you are finished, the graphic should look like the following figure:



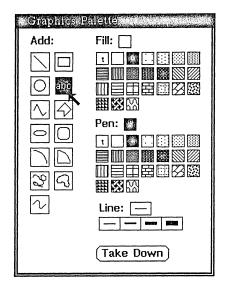
Key complete with labels

Adding a title to a graphic

The sales regions map is almost complete. To finish it, you add a title at the top, change the title to a larger point size, and make it bold.

If you don't have enough room at the top of the graphic, drag one of the corner handles up to make room.

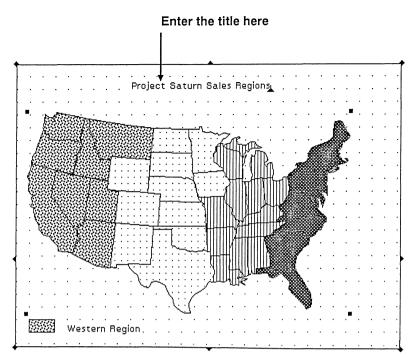
♦ Left click on the text icon on the graphics palette.



Selecting the text icon

The icon dims to show that you can now add text to the graphic.

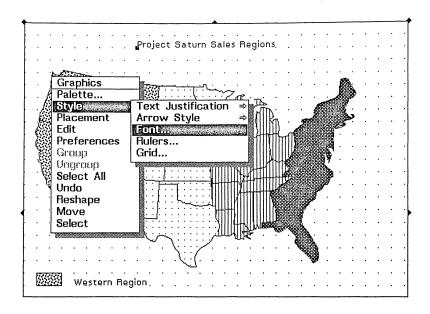
- Move the pointer to the top of the graphic. Left click.
- ♦ Enter the title as shown in the next figure.



Adding a title

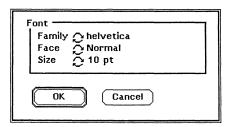
Notice that the title is in the same type as the text of the key labels. Because you want the title to stand out, you change the point size.

Right hold to bring up the Graphics menu. Highlight the Style option, and then highlight Font. Release.



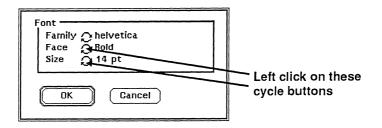
#### Changing the font

A dialog box listing the current type family, face, and size appears. You want to change the style to 14 point Helvetica bold.



Current font

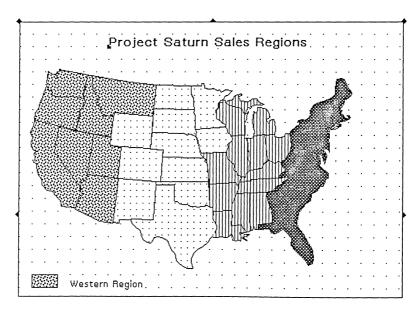
- ♦ Left click on the Face cycle button until you see the word Bold appear.
- ♦ Left click on the Size cycle button until you see 14 pt appear.



Selecting a new typeface and type size

#### \$\text{Deft click on the OK button.}

The title now appears in an 14 point bold font.



Title in 14 point bold font

Taking down the graphics palette

Now that you are finished editing the graphic, take down the graphics palette.

## ♦ Left click on the Take Down button on the graphics palette.

The palette disappears.

Now save your presentation.

Right hold on the File menu on the menu bar. Drag down to highlight the Write option. Highlight the Same File option. Release.

You are now ready to move on to the next chapter. To take a break beforehand, exit from the software as described at the end of Chapter 2.

## What you've learned

This chapter taught you how to:

- · import an image from the file system
- cut and paste a graphic from another BBN/Slate document
- use the graphics tools by editing a graphic

You also learned the difference between an image and a graphic. In the next chapter, you will print the document that you've created during the last four chapters.

# **7** Printing

BBN/Slate makes it easy for you to use very little paper in your everyday work. You can send memos through electronic mail, distribute company newsletters on-line, and review someone else's documents through conferencing. However, you'll also want to print out many of your documents.

With BBN/Slate, you can preview how your document will look when printed, add page numbers and dates, specify headers and footers for right and left pages, and much more.

Your presentation on Project Saturn is tomorrow. You want to print out your document to hand out during the presentation. During this work session, you:

- · make sure you are set up to print
- · add a footer to your document
- preview your document
- print your document

Before you begin

Before beginning this chapter, you should be in the document Presentation, in the +New folder. If you exited BBN/Slate at the end of the last chapter, re-enter the software first.

## Setting up to print

BBN/Slate prints to PostScript<sup>®</sup>-capable laser printers. Before you begin working through this chapter, make sure that a PostScript-capable printer is available from your workstation.

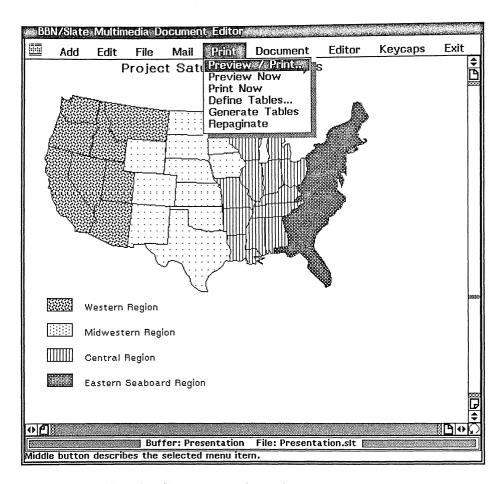
Also make sure that your system administrator has set up your printing commands correctly.

## Adding a footer to your document

You decide to add a footer to your document which contains the title, date, and page numbers. This information will help the audience find what they are looking for during the presentation and will help them file it away for future reference.

Adding a footer

When you add footers, you don't see them until you preview or print out the document. To add a footer, you select the Preview/Print option from the Print menu and fill in the information in the dialog box.



Selecting the Preview/Print option from the Print menu

♦ Right hold on the Print menu on the menu bar. Highlight the Preview/Print option. Release.

The Preview/Print dialog box appears.

Page Dimensions Margins Top: .7 Height: 11i Bottom: .7	
Orientation Page Number  Page Number  Start page Unnumbere	
☐ Generate Table of Contents ☐ Odd-Even Page Layout	☑ Print Headers
Header Both Pages:  Footer Both Pages: 1	
Columns Per page: 1 Gutter: .5i	Header/Footer Font Family O helvetica Face Normal
Spooling  To Printer To Previewer To File Setup Only Spooler: Ipr %s	Size 2 10 pt  OK Cancel

#### Preview/Print dialog box

BBN/Slate lets you put the same footer on all pages, or different footers on odd and even pages. For different footers, you tell BBN/Slate to use an odd-even page layout and then enter each footer into the dialog box.

You decide to have the same footer on both pages.

# $\diamondsuit$ Left click in the Footer field. Enter the following text:

Project Saturn~@date~@1

Enter the footer information here Page Dimensions Margins Width: 8.5i .75i Left .75i Top: Right: .75i Height: 11i Bottom: .75i Orientation . Page Numbers Start page number: Portrait Unnumbered title pages: 0 Landscape Print Headers ☐ Generate Table of Contents Odd-Even Page Layout Header : **Both Pages:** Both Pages: Project Saturn~@date~@1 Columns Header/Footer Font Columns per page: 1 Family 🔑 helvetica Gutter: .5i Face 🙇 Normal Size 🥭 10 pt Spooling . To Printer ○ To Previewer O To File O Setup Only

The Footer field should look like this:

#### Creating a footer

Spooler: Ipr %s

You just added information for the page number, current date, as well as the name of the document. When BBN/Slate prints the document, it will print the current page number in place of the @1 and the current date in place of the @date. The tilde (~) characters separate the footer into the left, center and right position on the page.

OK

Cancel

When you are finished typing in the footers, you can use the same dialog box to preview your document.

## Previewing your document

Previewing a document lets you see how it will look when printed. Since what you see in the document editor is slightly different from the printed output, you can preview it first to make sure it will look as you expect.

Some elements of your document, such as headers and footers, do not appear until you preview or print the document. In your printed document, lines and pages may break differently, and figures may may appear in a different position than on screen. If you use the previewer first, you can make any necessary adjustments before sending the document to the printer.

To preview a document, you select the Preview/Print option from the menu bar, as you have already done. Or you can send it directly to the previewer by using the Preview option from the same menu.

Sending a document to the previewer

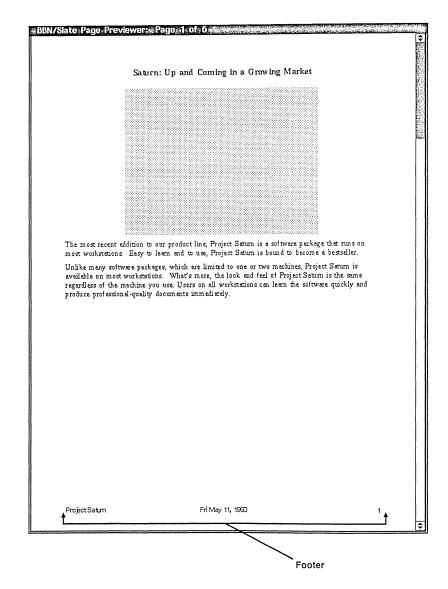
Since you have already selected the Preview/Print option, you are ready to send the document to the previewer.

- ♦ Left click on the button beside the To Previewer option.
- ♦ Left click on OK.

Page Dimensions — Margins — Left: .75i Left: .75i Height: 11i Bottom: .75i Right: .75i									
Orientation Page Numbers Start page number: 1 Unnumbered title pages: 0  Generate Table of Contents Print Headers Odd-Even Page Layout									
Header Both Pages:									
Footer Both Pages: Project Saturn~@date~@1									
Columns Columns per page: 1 Gutter: .5i  Spooling  Header/Footer Font Family O helvetica Face O Normal Size O 10 pt									
To Printer To Previewer To File Setup Only OK Cancel									
Left click here									

## Sending a document to the previewer

In a few seconds, the previewer window appears.

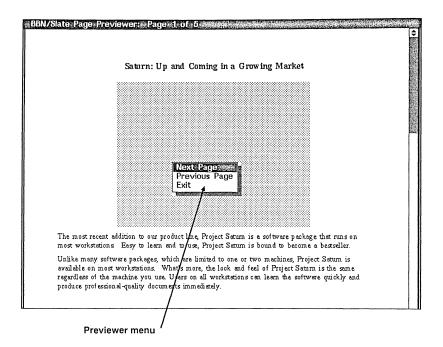


#### Previewer window

Moving through the document

There are several ways of paging through the document in the previewer. You can use the scroll bars on the right side of the window, the space bar, or the Previewer menu.

Right hold anywhere within the previewer window to bring up the previewer menu. Highlight the Next Page option. Release.



## Using the previewer window

You now see the second page of your document.

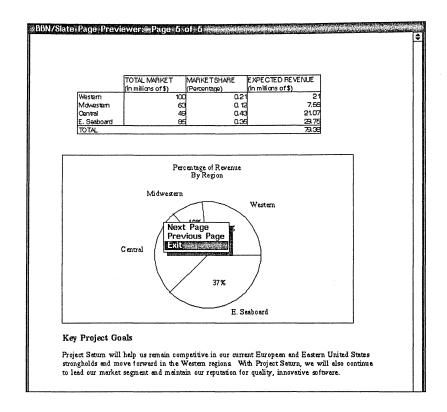
		Į.		
YEAR 1	YEAR 2	YEAR 3		
1				
20.60	27.81	32,96		
22.90	30.92	3664		
1				
7.40	9.99	1184		
11.90	16.07	1904		
2100	28.35	3360		
	- 1200			
1 1	ŀ			
8.40	11.34	1344		
470				
24.60	3321	3435		
5.50	7.43	880		
570	7.70	912		
3131	40.91	48 48		
107.00	144.45	17120		
<del></del>				
	236 230 2290 7.40 1190 2100 300 330 7.20 5360 8.40 4.70 11.50 24.60 5.50 5.70 8.90 10.20 30.00	20.60 27.81 230 3.10 22.90 30.92  7.40 9.99 11.90 16.07 21.00 28.05 3.00 4.05 3.30 4.45 7.20 9.72 53.60 72.63  8.40 11.34 4.70 6.05 11.50 15.50 24.60 33.21  5.50 7.40 5.70 7.70 8.90 12.02 10.20 13.77 30.30 40.91	2060 27.81 22.96 230 3.10 368 22.90 30.92 36.64  7.40 9.99 11.84 11.90 16.07 19.04 21.00 28.35 33.60 3.00 4.05 460 3.00 4.05 460 3.00 7.20 9.72 11.62 53.60 72.63 66.06  8.40 11.34 13.44 4.70 6.35 7.52 11.60 15.53 19.40 24.60 30.21 99.96  5.50 7.43 880 5.70 7.70 9.12 8.90 12.02 13.77 16.32 30.00 40.91 48.46	20.60 27.81 2296 2.00 3.10 3.66 2.2.90 30.92 36.64  7.40 9.99 11.84 11.90 16.07 19.04 2.100 28.05 36.60 3.00 4.05 48.0 3.00 4.05 6.28 7.20 9.72 11.62 63.80 72.63 86.08  8.40 11.34 13.44 4.70 6.05 7.62 11.50 15.50 19.40 24.60 30.21 99.96  5.50 7.40 8.80 5.70 9.72 88.0 5.70 9.72 88.0 24.61 30.21 99.96

## Second page of preview

Exiting the previewer

Continue to page through the previewed document until you come to the end. When you reach the last page, you are ready to exit the previewer.

♦ Right hold to display the Previewer menu. Highlight Exit. Release.



#### Exiting the previewer

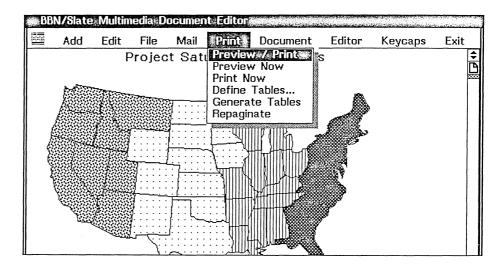
## Printing your document

After previewing your document, you are ready to send it to the printer. You first set up your print options, and then send the document to the printer.

Setting print options

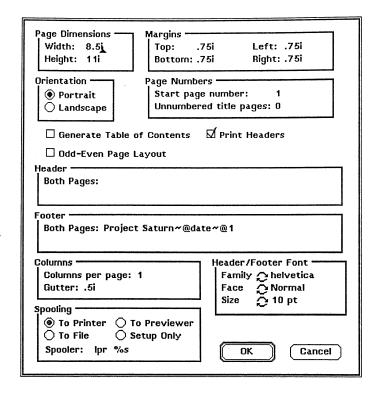
To set up your printing options, you use the Preview/Print option and fill in the appropriate information.

♦ Right hold on the Print menu on the menu bar. Highlight the Preview/Print option. Release.



Using the Preview/Print option to set print options

The Preview/Print dialog box appears.



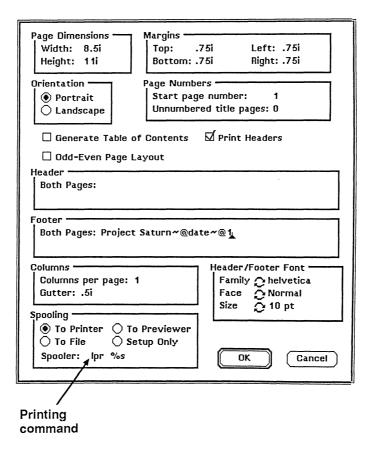
## The Preview/Print dialog box

Notice that the footer information you entered earlier is still in place.

Using this dialog box, you can set page dimensions, margins, and orientation (whether the document prints vertically or horizontally). You can also tell BBN/Slate whether to create a table of contents for the document.

For now, you are only interested in printing the document with its footers. You need to make sure that the spooling information is set correctly. The spooling information contains the operating-system command you usually use to send files to the printer plus a placeholder (%s) for the document name.

In the figure below, the Spooler field contains the command lpr %s. The word lpr is an operating-system command used to send files to the printer, and %s is a placeholder for the name Presentation. Your operating-system command may be different.



Spooling information in the Preview/Print dialog box

♦ Determine if the command listed in the Spooler field is correct for your operating system.

If you don't know whether this command is correct, contact your system administrator.

♦ If the command listed is incorrect, left click at the end of the command. Delete the command listed using the Delete key and enter the correct command.

You are now ready to print.

#### Left click on OK.

While BBN/Slate is creating the PostScript version of your document, it remains on screen and you see an hourglass instead of a cursor. When BBN/Slate finishes creating this version, you see the cursor again.

If BBN/Slate has trouble printing your document, you will see a message stating the reason. Contact your system administrator if you cannot print from your workstation.

### Exiting from BBN/Slate

You are finished working through this tutorial, so you can exit from the document editor and from BBN/Slate. Before you exit, save the Presentation document.

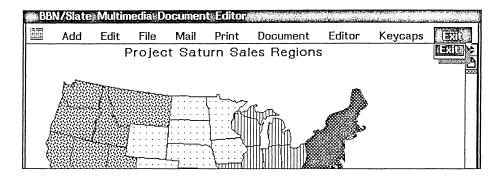
Pright hold on the File menu. Highlight the Write option, then highlight the Same File option. Release.

Your file is now saved.

Exiting from the document editor

To exit from the document editor, use the Exit menu on the menu bar.

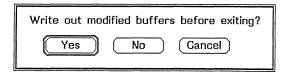
♦ Right hold on the Exit menu. Drag down to highlight the Exit option. Release.



Exiting from the document editor

Because you modified Presentation while setting it up for printing, BBN/Slate asks you whether to save the modifications.

♦ Left click on the Yes button.

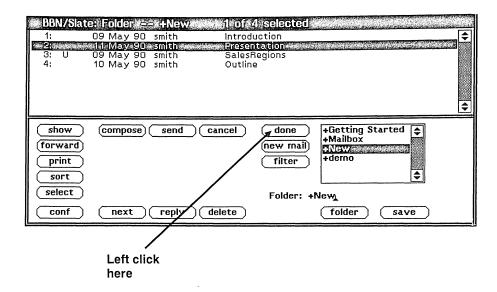


The document editor now closes.

Exiting from BBN/Slate

Now exit from the software.

♦ Left click on the done button in the document manager.



Your window manager iconifies the document manager and places it on your desktop. If you decide to re-enter BBN/Slate before leaving your windowing system, left click on the icon to restart the software.

#### What you've learned

In this chapter, you have:

- · added footers to your document
- previewed your document
- printed your document
- exited from the document editor
- exited from BBN/Slate

Now move on to the Epilogue to learn about becoming an advanced BBN/Slate user.

# 8 Epilogue

You have just put together a practice presentation with the help of BBN/Slate software. You've seen first-hand how BBN/Slate makes it easy for you to gather information from your colleagues in remote places, to have other people review your ideas, and to professionally present the finished product. While preparing this presentation, you learned a lot about BBN/Slate's media types and main features.

### What you've learned

During the course of this tutorial, you have learned to work with multimedia documents, create and edit most of the media types, share information using electronic mail, and print documents.

Creating multimedia documents

You started with text, then gradually added other media types, including an image, a graphic, spreadsheets, and business graphics.

You created the document in the document editor. Because the document editor is integrated, you worked with all of the media types without having to switch to other software programs.

Working with media types

In this tutorial, you learned how to use most of the media types available in BBN/Slate, including text, spreadsheets, business graphs, images, and graphics. By working with each media type, you learned how to use each of the media-type editors.

## Sharing information

To exchange information with other people, you learned how to send multimedia documents through the mail and how to receive mail from other users. You also learned how to print your documents.

## Managing your work

While creating, mailing, and printing multimedia documents, you learned to manage your work within BBN/Slate.

By working through the chapters in this tutorial, you also became familiar with the document manager and the document editor, and learned how to:

- open folders and files
- create folders
- create new documents
- move around in a document
- · close a document
- open multiple files
- · copy files
- exit from the document editor
- exit from BBN/Slate

As you managed your work, you became comfortable using the mouse to select options from menus, manage files and folders, and respond to dialog boxes.

#### Moving on from here

You have accomplished a lot by going through this tutorial and have learned enough to use BBN/Slate in your everyday work. As you continue to use BBN/Slate, you'll discover other ways to make

your work easier and faster. Not only will you become more advanced in the topics you've seen a glimpse of here, but you will also learn about other features, such as conferencing, enclosures, and speech.

Becoming an advanced user

While working with media types in this tutorial, you learned about the basic operations for each one. As you work more with BBN/Slate, you'll become acquainted with these more advanced features:

**Text.** BBN/Slate comes with a variety of templates, which you can use and adapt for yourself. Create your own templates for the kinds of documents you create often, such as monthly reports and letters. Other advanced text features include a spelling checker, automatic section and figure numbering, and the Multilingual Option, which allows you to write in different languages.

BBN/Slate makes frequent backup copies of your document through a process called *checkpointing*. Every so often, BBN/Slate saves your document to a UNIX file with the extension CKP. If you should accidently leave BBN/Slate without saving your document, you can use the CKP file as a backup. CKP files do not appear in the document summary pane. Be aware that CKP files may not contain your most recent changes. To be sure you don't lose any information, frequently save the document yourself.

**Spreadsheets.** Using the spreadsheet editor, you can sort entire spreadsheets or regions of spreadsheets by one value or several. You can generate line graphs as well as bargraphs and piecharts, and you can read in data from or write data to Lotus1-2-3™ spreadsheets.

Graphics and images. In addition to the features you worked with, you can add arrows to any graphics and edit any objects to change the line thickness, line pattern, or fill patterns. As well as

importing black-and-white images, you can import color images from your file system or capture images from your workstation display. You can scale, invert, and reflect entire images or any part of them.

Electronic mail. Because electronic mail is easy to use in BBN/Slate, you may soon find yourself using mail for multiple tasks. For example, if you have a company or department newsletter, put it in BBN/Slate and distribute it electronically. You'll save yourself time and paper.

You might benefit unexpectedly from using multimedia mail. Because you can communicate complex ideas quickly, you will be able to make well-informed decisions faster.

**Document management.** In the document manager, you can sort files, delete files, delete or rename folders, move files from one folder to another, and even link folders to particular directories in your file system. BBN/Slate also lets you set folder permissions so that only certain users or groups may read or write to specified folders.

Learning other features

Experiment with other features that you didn't try out in this tutorial.

Speech. If you have the appropriate workstation configuration, you can insert and play back digitized voice annotations. Use the speech feature to make comments on documents you are reviewing for other people, to personalize mail messages, or to add interest to on-line newsletters.

Conferencing. BBN/Slate includes a feature that lets you confer over documents with other users. Several people can confer at the same time, although only one person can take control of the

document at once. If you own the document, you can decide whether or not to save the changes made during the conference. A similar feature is the conversation window, which lets you confer by typing a dialog with other BBN/Slate users.

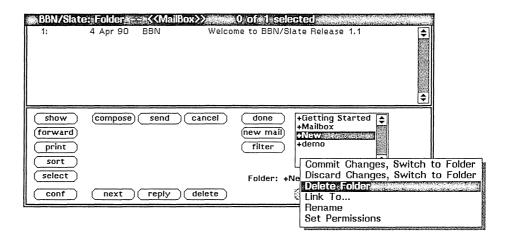
Enclosures. What if you need to send an external file to a BBN/Slate user? Using a multimedia document as an envelope, you can send data from UNIX files, the executable file itself, or a reference to the file to anyone using BBN/Slate. By including an executable file as an enclosure, you can turn BBN/Slate into a control panel to control other programs.

Extension language. BBN/Slate contains its own programming language that lets you customize your own environment or that of your work group. You can use the Slate Extension Language (SEL) to automate many of the routine tasks that you do every day.

Repeating the tutorial

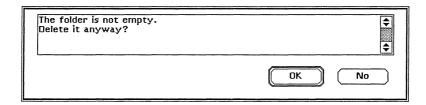
If you want to go through the tutorial again, first delete the +New folder and all the documents in it. First, make sure you are in BBN/Slate.

- ♦ Using the left mouse button, double-click on the name +New in the folder list.
- Right hold on the folder button.
- Highlight the Delete Folder option.
- Release.



#### Deleting a folder

Because this folder contains files, BBN/Slate asks whether to delete the folder and all the files in it.



Deleting a folder containing documents

Answer yes.

#### & Left click on the OK button.

You can now repeat the tutorial.

Finding out more information

To learn more about BBN/Slate, see the *Reference Manual*, the *Customizing Manual*, the *System Topics* manual, and if you have the Multilingual Option, the *Multilingual Documents* manual. The more you work with BBN/Slate, the more you'll discover new ways to make BBN/Slate work for you.

# Index

A	cells in spreadsheets		
	enlarging 5–14		
Add button in the rulings dialog box 5–33	highlighted 5–4		
Add menu 5–9	moving to 5–9		
Add-Image-BBN/Slate Bitmap option 6–3	specifying a range 5–27		
adding	centering text 3–9		
footers 7–2	Change Attributes option 6–5		
headings 3–9	changing		
lists 3–12	graphics 6–15		
to lists 3–19	image attributes 6–5		
spreadsheets 5–8	text 3-24		
text styles 4–2	type styles 3–26		
Add-Spreadsheet option 5–9	checkpointing 8–3		
alternate fields in mail headers 4–7	CKP files 8–3		
Apply button in the rulings dialog box 5–33	Clear button in the rulings dialog box 5–37		
arrows	clipboard 3–23		
using to scroll horizontally 2–23 using to scroll vertically 2–13	closing the document editor 7–15		
using to scron vertically 2–13	colons in spreadsheet formulas 5–27		
	color images 8–4		
B	command pane 2–4		
	compose button 3–3, 4–10		
backing up 8–3	Compose-From System Template option 3–4		
BBN/Slate	composing messages 4–10, 4–13		
exiting 7–16			
introduction to 1–1	conferencing 1–3, 8–4		
starting 2–2	copying documents 2–28		
BBN/Slate Bitmap option 6–3			
BBN/Slate interface 1–4	graphics 6–10		
buffers 3–4	graphics between documents 6–8		
moving between 6–12	objects 6–25		
names 3-4	several documents at once 2–29		
bulleted lists 3–13	copying cells in spreadsheets 5–24		
business graphs	creating		
creating 5–1	business graphs 5–1		
defining type 5–42	folders 2–26		
defining values 5–43	graphics 6–1		
media type 1–2	images 6–1		
media type 5–1	new files 3–3		
titles for 5–42	piecharts 5–40		
	spreadsheets 5–1, 5–8		
C	current date 7–5		
_	customizing your environment 1–4, 8–5		
calculations in spreadsheet formulas 5–24	cutting text 3–20		
capturing images from your workstation	cycle buttons		
display 8–4	using 3–28		

D	Editor-Buffer-Switch To option 4–21, 6–12		
	Edit-Paste option 6–14		
date	electronic mail 1–3		
adding to footer 7–2	embedding lists 3–15		
Delete Folder option 8–5	enclosures 8–5		
deleting	media type 1–3		
folders 8–5	ending lists 3–15		
text 3-21	enlarging		
description text style 3–14	cells 5–14		
dialog boxes 3–27	text 3-29		
digitized speech media type 1-3	entering		
document editor 2–3	formulas in spreadsheets 5–22		
exiting 7–15	numbers in spreadsheets 5–20		
overview 1–2	text 3-6		
document manager 2–3	Exit menu 2–32, 7–16		
Document menu 3–26	• . •		
document summary pane 2-4	exiting BBN/Slate 7–16		
documents	document editor 7–15		
backing up 8–3	previewer 7–10		
copying 2–28	extension language 1–4, 8–5		
copying graphics between 6–8			
copying several at once 2–29	<b>T</b>		
mailing 4–1	F		
managing 2–25	folds 1 6		
moving to end $2-20$	fields 4–6		
moving to start 2–20	File menu 3–33		
moving through 2–11	files		
naming 3–36	copying 2–25		
opening 2–6, 2–8	managing 2–25		
opening new 3–3	naming 3–36		
storing 3–35	opening new 3–3		
Document-Set Language/Font option 3-26	storing 3–35		
done button 7–16	File-Write-New File option 3–35		
drawing objects 6–21	File-Write-Same File option 6–43, 7–15		
Duplicate option	fill patterns 6–31		
Graphics menu 6–25	filling in objects 6–31		
1	Folder-Delete Folder option 8–5		
	folders		
E	creating 2–26		
L	deleting 8–5		
edge icons	managing 2–25		
using to move vertically 2–20	naming 2–6, 2–24		
Edit menu 3–32, 5–39	opening 2-6		
Edit-Change Attributes option 5–39, 6–5			
	setting permissions for 8–4 font		
Edit-Copy option 6–11	softing family 2 27		
editing	setting family 3–27		
graphics 6–15	setting size 3–27		
spreadsheets 5–3	Font option		
text 3-24	Graphics menu 6–40		
text inside graphics 6–40	tooters		
editor	adding 7–2		
exiting 7–15	formulas in spreadsheets 5–5, 5–11, 5–22		
Editor menu 4–21	copying 5–24		
Editor-Buffer option 4–21	recalculating 5–5		

G	images
generating graphs from spreadsheets 5–41 getting help 3–32 Graphic-Edit-Scale option 6–16 graphics  adding from a document 6–8 adding text to 6–34 adding titles to 6–38 changing text 6–40 copying 6–10 creating 6–1 duplicating objects 6–25 editing 6–15 handles 6–11 media type 1–3, 6–2 palette 6–21 pasting 6–12 Graphics menu 6–16 Graphics Palette Keep Up button 6–23 Graphics-Edit-Duplicate option 6–25 Graphics-Palette option 6–21 Graphics-Style-Font option 6–40 graphs business 5–1	capturing from your workstation display 8–4 changing attributes 6–5 changing outlines 6–7 creating 6–1 handles 6–5 importing from file system 6–2 justification 6–7 media type 1–3, 6–2 importing images from file system 6–2 interface 1–4 introduction to BBN/Slate 1–1 itemization style 3–14   J justification of images 6–7  K  Keep Up button in the Graphics Palette 6–23 in the rulings dialog box 5–32 keyboard shortcuts 5–48
regenerating 5–5	L
H handles graphics 6–11 image 6–5 spreadsheet 5–28 headers mail 4–5 headings adding 3–9 help getting 3–32 highlighted cells 5–4 highlighting text 3–20	labels in spreadsheets 5–11 lines in spreadsheets 5–31 linking spreadsheets and graphs 5–47 lists adding 3–12 adding to 3–19 bulleted 3–13 embedding 3–15 ending 3–15 numbered 3–13 renumbering 3–20 Lotus 1-2-3 spreadsheets using in BBN/Slate 8–3
horizontal movement 2–23 horizontally	M
moving 2–23  I  Icons  in the horizontal scroll bar 2–23  in the vertical scroll bar 2–12	mail composing messages 4–10 electronic 1–3 headers 4–5 receiving 4–16 using 4–1 Mail menu 4–4 mailing documents 4–1 Mail-Send as Multimedia option 4–4

Mail-Send option 4–4	N		
Mail-Send Message option 4–14	names		
managing	names buffer 3–4		
files 2–25	file 3-4, 3-36		
folders 2–25	new mail		
margins	announcement 4–16		
setting during printing 7–13	button 4–17		
media types	next button 4–20		
business graphs 1–2, 5–1	next mail message		
enclosures 1–3	reading 4–20		
graphics 6–2	Next Page option 7–9		
graphics 1–3	noindent text style 4–2		
images 6–2	numbered lists 3–13		
images 1–3	numbers in spreadsheets 5–11		
menus for 3–7			
speech 1–3, 8–4	_		
spreadsheets 1–2, 5–1	0		
text 1–2, 3–1	••		
menu bar 3–27	objects		
menus	drawing 6-21		
Add 5-9	duplicating 6–25		
Document 3–26	filling in 6–31		
Edit 3–32, 5–39	moving 6–30		
Editor 4–21	positioning 6–29		
Exit 2–32, 7–16	stretching 6–30		
File 3–33	opening		
Graphics 6–16	documents 2–6, 2–8		
Mail 4–4	folders 2–6 new files 3–3		
Previewer 7–8			
Print 7–2	operating-system command for printing 7–14 options		
Sheet 5–6	Add-Image-BBN/Slate Bitmap 6-3		
Text 3–7	Add-Spreadsheet 5–9		
messages	Compose-From System Template 3–4		
composing 4–10, 4–13	Document-Set Language/Font 3-26		
receiving 4–16	Edit-Change Attributes 5–39, 6–5		
status 4–8	Edit-Copy 6–11		
mistakes	Editor-Buffer 4–21		
correcting in spreadsheets 5-20	Editor-Buffer-Switch To 4-21, 6-12		
correcting in text 3–8	Edit-Paste 6–14		
mouse	File-Write-New File 3–35		
using 2–4	File-Write-Same File 6-43, 7-15		
moving	Folder-Delete folder 8–5		
across in a spreadsheet 5–18	Graphics-Edit-Duplicate 6-25		
between buffers 6–12	Graphics-Edit-Scale 6–16		
down in a spreadsheet 5–18	Graphics-Palette 6–21		
to end of a document 2–20	Graphics-Style-Font 6-40		
inside spreadsheets 5–9	Mail-Send 4–4		
to start of a document 2–20	Mail-Send as Multimedia 4-4		
through a document 2–11	Mail-Send-Send Message 4–14		
moving objects 6–30	Previewer-Next Page 7–9		
	for printing 7–11		
Multilingual Option 8–3	Print-Preview/Print 7–2		

options (continued) Save-Copy Selected Documents to Folder 2–28 Sheet-Fill Down 5–24 Sheet-Graph-Create 5–41 Sheet-Graph-Generate 5–6 Sheet-Rulings 5–31 Show-Show Document with Previous Document 6–9 Text-Add-enumeration 3–13 Text-Add-noindent 3–7, 4–2 Text-Edit-Cut 3–21 Text-Edit-Paste 3–22 Text-Styles-Local Change 3–29 orientation during printing 7–13 outlines	print options setting 7–11 printing 7–1 adding date 7–2 adding footers 7–2 command 7–14 creating table of contents 7–13 orientation 7–13 page dimensions 7–13 previewing 7–6 setting margins 7–13 setting up 7–1 spooling information 7–13 Print-Preview/Print option 7–2
around images 6–7	R
page setting dimensions 7–13 page icon using to scroll vertically 2–17 paging through a document 2–17 Palette option Graphics menu 6–21 panes in document manager 2–3 Paste option Edit menu 6–14 pasting graphics 6–12 text 3–20 patterns using 6–31 permissions setting folder 8–4	Range field in piecharts 5–45 reading mail 4–16 next mail message 4–20 recalculating formulas in spreadsheets 5–5 receiving mail 4–16 regenerating graphs 5–5 renumbering lists 3–20 repeating the tutorial 8–5 resizing spreadsheets 5–28 rulings adding to spreadsheets 5–31 rulings dialog box Add button 5–33 Apply button 5–33 Clear button 5–37 Keep Up button 5–32 Take Down button 5–38
piecharts creating 5–40 defining values 5–43 links to spreadsheets 5–47 positioning objects 6–29 Postscript printers printing to 7–1 previewer exiting 7–10 moving through documents in 7–8 Previewer menu 7–8 previewer window 7–7 Previewer-Next Page option 7–9 previewing documents before printing 7–6 Preview/Print option 7–2, 7–6 Print menu 7–2	Same File option 6–43, 7–15 Save-Copy Selected Documents to Folder option 2–28 saving documents 3–35 Scale option Graphics menu 6–16 screen dumps 8–4 screens start-up 2–2 scroll bars using 2–11 scroll bubble vertical 2–13

scrolling through a document 2–11	spreadsheets (continued)			
selecting	sorting 8–3			
text 3-20	specifying a range of cells 5–27			
selecting spreadsheet cells 5-4	types of values in 5–11			
Send option 4–4	starting BBN/Slate 2-2			
sending documents: 4–1	start-up screen 2–2			
	status messages 4–8			
font family 3–27	storing documents 3–35			
font size 3–27	stretching objects 6–30			
	style			
print options 7–11	changing type 3–26			
Sheet menu 5–6	styles			
Sheet-Edit-Fill Down option 5–24	text 3–7			
Sheet-Graph-Create option 5–41	Switch To option 6–12			
Sheet-Graph-Generate option 5–6				
Sheet-Rulings option 5–31	T			
shortcuts	. 11 ( ) (			
keyboard 5–48	table of contents			
Show Document with Previous Document	creating during printing 7-13			
option 6–9	Take Down button			
size	Graphics palette 6–42			
changing text 3–29	rulings dialog box 5–38			
sorting	templates 3–5			
in spreadsheets 8–3	text			
speech media type 1–3, 8–4	adding to graphics 6–34			
spelling checker 8–3	centering 3–9			
spooling information	changing in graphics 6–40			
for printing 7–13	correcting mistakes 3-8			
spreadsheet media type 1–2	cutting 3–20			
spreadsheets	editing 3–24			
adding 5–8	enlarging 3–29			
calculations in 5–24	entering 3–6			
cells in 5–4	highlighting 3-20			
changing values 5–3	media type 1–2, 3–1			
copying formulas within 5–24	pasting 3–20			
correcting mistakes 5-20	styles 3–7			
creating 5–1, 5–8	working with 3–3			
creating graphics from 5-40	Text menu 3–7			
defining graph types 5-42	text styles			
defining values for graphs 5–43	adding 4–2			
editing 5–3	noindent 4–2			
entering formulas 5–22	Text-Add-enumeration option 3–13			
entering numbers in 5–20	Text-Add-noindent option 3–7, 4–2			
formulas in 5–5, 5–11	Text-Edit-Cut option 3–21			
handles 5–28	Text-Edit-Paste option 3–22			
labels in 5–11	Text-Styles-Local Change option 3-29			
links to graphs 5-47	titles			
media type 5-1	adding to graphics 6–38			
moving across 5–18	for business graphs 5–42			
moving down 5–18	tutorial			
moving within 5–9	repeating 8–5			
numbers in 5–11	type style			
resizing 5–28	changing 3–26			
rulings in 5–31	types of values in spreadsheets 5–11			

```
using electronic mail 4-1
using the mouse 2-4

V

values
    changing in spreadsheets 5-3
    defining for piecharts 5-43
    entering in spreadsheets 5-20
vertical movement 2-12
vertically
    moving 2-12

W

windowing system 2-2
working with text 3-3

X
```

XRange field in piecharts 5-43

# BBN Software Products A Division of Bolt Beranek and Newman Inc.

Your opinions about our products and services are important to us. Please use this self-addressed, stamped form to help us evaluate this manual. Your response to the questions listed below will help us assess our current documentation and plan ways to improve it to meet your needs. Just fill in your responses, detach this sheet, fold and tape it, and drop it in the mail. We'll pay careful attention to what you say!

Manual Title: BBN/Slate Getting Started (Release 1.1	1)		
List your operating system:		Date:	_//
General Comments:	Yes	Somewhat	No
Do you like this manual?			
Is it easy to read?			
Is the order of topics easy to follow?			
Is the information accurate?			
Can you easily find the information you need?			
Do the examples and illustrations help?			
Can you easily apply the described features to your own needs?			
Do you use on-line help?			
How do you primarily use this manual?			
	orial		☐ Reference
☐ Check here to receive information about our Edu	ıcation Services		
☐ Check here to receive the BBN Software Quarter	<i>ly</i> newsletter.		
Please fill in the following information:			
Name	Title		
Company	Street		
City	State		
Zip Code	Phone		

Fold



### **BUSINESS REPLY ENVELOPE**

FIRST CLASS

PERMIT NO. 36450

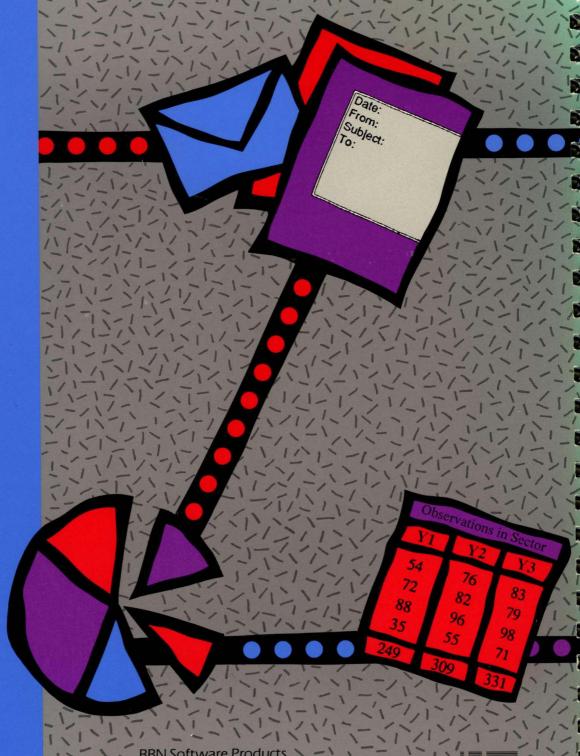
CAMBRIDGE, MA

POSTAGE WILL BE PAID BY ADDRESSEE

BBN Software Products
A Division of Bolt Beranek and Newman Inc.
10 Fawcett Street
Cambridge, MA 02138

Attn: Manager, Documentation

NO POSTAGE NECESSARY IF MAILED IN THE



2523009

BBN Software Products A Division of Bolt Beranek and Newman Inc.





This manual is designed to lie flat on your desktop. When using the manual, tuck this flap inside the back cover. When storing the manual on your bookshelf, tuck the flap inside the front cover.