

RAGTIME® 5



Training Manual

for Windows Users

RagTime GmbH

RagTime Solo must not be used commercially.

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Overview

RagTime 5 Documentation 
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1 OVERVIEW

The RagTime 5 documentation consists of several parts on various media:

- **About RagTime** (printed and as a PDF document)
Installation and configuration information along with an overview of the philosophy and concepts behind RagTime 5. Please install RagTime 5 before reading the documentation. It helps to work through instructions on your PC as you read along.
- this **Training Manual** (printed and as a PDF document)
Includes 8 exercises in 3 steps for newcomers to RagTime 5
- **RagTime 5 Reference** (printed, on screen and as PDF document)
Includes overviews, information on documents and components, and doubles as a reference for all menus, commands, tools, windows, dialog information and boxes.
- **Formulas and Functions** (on screen and as a PDF document)
Describes and provides examples of mathematical functions and operations.
- **RagTime 5 for RagTime 3 Users** (PDF document and on screen)
Explains the differences between RagTime 3 and RagTime 5.

The on-screen documentation is installed together with the program. It is intended for reference and contains detailed information on commands, features, functions, and so on. All topics are interlinked via cross references, and there are numerous search capabilities including an index, lists of commands and functions, and a full-text search tool.

Except for the Training Manual, which is available in two versions, the RagTime 5 documentation is suited for  Microsoft Windows and  MacOS users alike. The few differences that do exist are flagged with the afore-used symbols.

Please first install RagTime 5 on your computer and then begin reading the documentation. It always makes sense to try out what you have just read.

The following is an overview of the contents of each chapter in the training manual. You can also see in this list what is done in each exercise, in case you are looking for a particular procedure or want to get ideas for your own document.

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TYPOGRAPHIC CONVENTIONS

This manual uses the following typographic conventions when formatting text.

Standard Text Style	The style to describe RagTime and its properties
Formula Style	The style for formulas and cell addresses
COMMAND STYLE	This is the style applied to commands, keys, menu descriptions and dialog headers. Menu descriptions such as <code>FORMAT→STYLE→BOLD</code> indicate layered menus whose menu items are called up in sequence.

B

When this symbol appears on the right page, it denotes comments especially directed to beginners. On the left-hand side, you will find alternative solutions at the same user level, pointers on familiarizing yourself with the program, alerts, and references to other topics within the Training Manual. If you have little experience in computers and sophisticated computer programs, it makes sense to read the information provided for beginners. Since we do not expect you to read this manual cover to cover, you may find similar pointers in several places.

A

When this symbol appears on the right page, it denotes comments especially directed to advanced users. These pointers present solutions to complex tasks and include procedures and comments required to handle sophisticated documents. Those readers who are less advanced should wait to read these comments until they have become more familiar with RagTime. Since we do not expect you to read this manual cover to cover, you may find similar pointers in several places.



Introduction

Whom This Training Is For ⌚ What to Expect: the Value of the Training Manual ⌚ The Left and Right Pages ⌚ The Structure of the Exercises ⌚ Before You Start: What You Should Know about RagTime ⌚ Extensions and Cooperation with Other Programs

2 INTRODUCTION

Whom This Training Is For

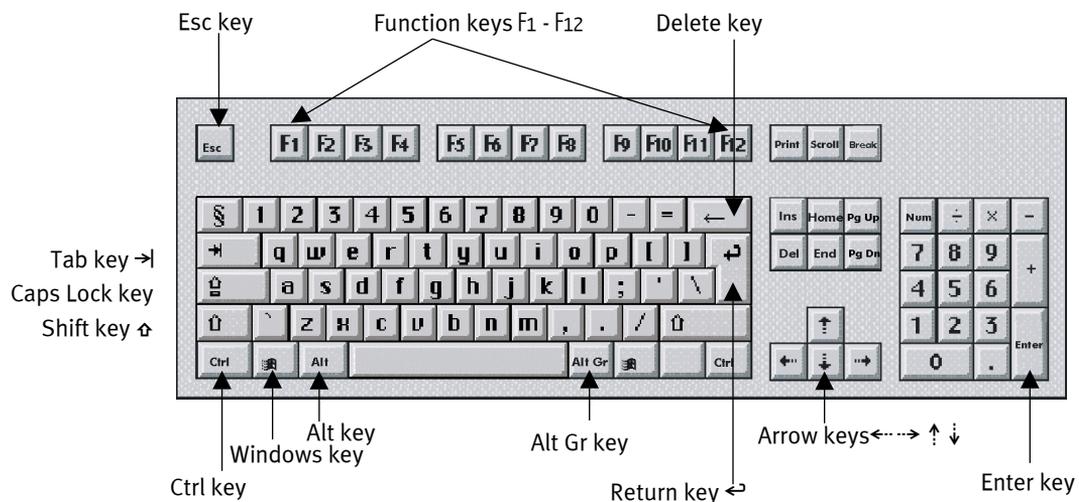
This training is intended to give the novice a straightforward introduction to the basics of RagTime 5. However, you will benefit most from working through the exercises if you are familiar with standard PC operations. If you need to learn these basic skills, the following possibilities are available:

→ Many windows-based PCs are shipped with short introductory documentation and tutorials in print and on CD. Current releases include “Introducing Microsoft Windows 98” on CD and the booklet entitled “Introducing Microsoft Windows 95.” We recommend that you read these or other available Windows-related publications to become acquainted with the basics of the operating system. To gain a basic understanding of the ins and outs of Windows, the most well suited chapters are “Introducing Windows 98” on the “Microsoft Windows 98 Start” CD and the chapters on the Program Manager, File Manager/Windows Explorer and printing in the “Introducing Microsoft Windows 95” book.

Little effort is required and the results are of great use.

In this way, you can gain the following essential knowledge and skills:

You Know the Names and Uses of the Most Important Keys...



The keyboard layout displayed here may differ from the keyboard you're actually using.

You Know Your Way around the Desktop When You Can...

- differentiate among the various objects on the electronic desktop (program, file, folder and desktop icons),
- identify which window, program or other object is active; and
- open and close windows or minimize, maximize or restore them to suit your needs.

You Know How to Use the Mouse When You...

- can select and move objects on the electronic desktop (↵),
- know what a click (↵) and a double click (↵↵) do,
- can differentiate between functions assigned to the left and right mouse buttons,
- can select a command from a menu (☰),
- can start and end a program,
- are able to open and close windows.

You Can Navigate in the Windows Operating System When You...

- can switch among several programs using the task bar,
- know how to name files (□ documents),
- know how to select a folder (📁) in which you want to save a document,
- are able to find and open files from the File Manager or Windows Explorer and from a program,
- can print the results of your work.

It would also be advantageous if you are familiar with word processing.

What to Expect: the Value of the Training Manual

Chapters 4, 5, and 6 comprise the main part of the training. In these chapters, you are introduced to practical work with RagTime 5 (more about this in chapter 3)

The Left and Right Pages

A special feature of chapters 4 through 6 is the difference in the content of the left and right pages.

The actual exercises, which appear on the left pages, are intended for RagTime novices in particular and treat basic material, or an “essential curriculum.”

The right pages do not have a rigid structure, but are oriented to the facing pages and complement them. They contain two different kinds of comments that should help you gain a firmer command of the program.

- > Supplements flagged with a B are primarily targeted toward providing newcomers without a background in comparable programs with alternative solutions to those presented on the left along with tips and tricks to make life easier.
- > Notes flagged with an A are targeted toward advanced users who have in-depth knowledge of RagTime and similar programs and are interested in solving complex problems immediately.

The Structure of the Exercises

The individual exercises are structured as follows: First, the most important goals that you should achieve in the exercise are presented. Also, an illustration of the result of the exercise is provided with comments. This should give you an impression of what lies ahead so that you can better keep the goals in mind.

•••••> *Description and illustration of the goal*

Next comes the actual exercise. You will work through a problem in steps, which are very detailed in the initial exercises. The exercises are intentionally structured to leave you freedom in shaping the example. Please note that although an exercise is divided into a number of sections, the steps are numbered consecutively throughout the entire exercise.

•••••> *Doing the exercise*

←••••• All steps are consecutively numbered

Each chapter ends with a summary of material introduced in the chapter. Chapter 7 provides a summary including the main points of the exercises, and illustrations and overviews elucidating important procedures used in working with RagTime 5. The conclusion suggests ways to continue learning about RagTime.

•••••> *Summary*

Before You Start: What You Should Know about RagTime

RagTime is an integrated office application program developed in Europe. It made its première before a large, enthusiastic audience at the Hanover CeBIT trade fair in 1986. From the start, RagTime was conceived as a multilingual program, so there were soon versions in many European languages. In 1999, RagTime was ported to Windows and has since been available to both Windows and Macintosh users.

The key features of RagTime are the different types of components in a single document and their display on pages. What does this mean? Imagine that you are sitting at your desk with a blank sheet of paper in front of you. Being a creative person armed with all sorts of tools, you can conjure up various things on the paper.

They might be texts in all imaginable forms. You can draw diverse forms on the paper. You can perform highly complex calculations and represent the results in three-dimensional graphs. You can also paste pictures here and there and write captions for them. Probably you have

selected your writing, drawing or calculating tools not to limit but to support your imagination. In any case, you naturally assume that you can put anything on the paper lying before you. And that is exactly what RagTime can do—put everything on one page, in one document, with one program. You don't have to worry about different file types or decide prematurely whether text, spreadsheets or layouts are most important for you in a document. All components are treated equally and may be combined in nearly any fashion. You can choose from a variety of output possibilities. RagTime allows you to send jobs to an inkjet or laser printer, expose color-separated documents for offset printing, export files in full or in part into Acrobat PDF, EPS or—for the Internet—HTML format.

What makes these different output options possible are the software's integrated components (word processor, spreadsheet, etc.) which you can use as you would stand-alone programs. However, you can also join the components in a variety of ways. For example, a result from a spreadsheet may be used in a text so that the text is automatically modified to reflect changes in the spreadsheet. You can install components in a layout to include different sorts of data on one page.

You can also install components in spreadsheet cells or as “flowing objects” in a text. All this can be done, if well planned, when you begin working on a document, or later, when the requirements of a document become clearer or are completely revised.

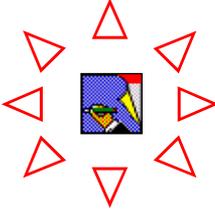
Extensions and Cooperation with Other Programs

Most daily office routines can be performed with RagTime 5. But when you need a solution that was not anticipated in the spectrum of RagTime's features, we offer numerous possibilities for extensions and interfaces to other applications.

→ Extensions

RagTime may be extended nearly without limit. Graphs and polygons are examples of extensions. Certain third-party extensions are available, e.g RagTime Connect (links RagTime to databases) and SlideTime, a presentation program. Documents created in RagTime 3 or 4 for Mac OS or RagTime 5 can be used under RagTime 5.5 for Windows. Please refer to the “Read Me” file on your installation CD for further information.

Another of RagTime's strong points is its variety of import and export capabilities. RagTime documents can be linked to SQL databases and other programs with built-in ODBC support using ODBC middleware. Filters currently available are listed in the following table.

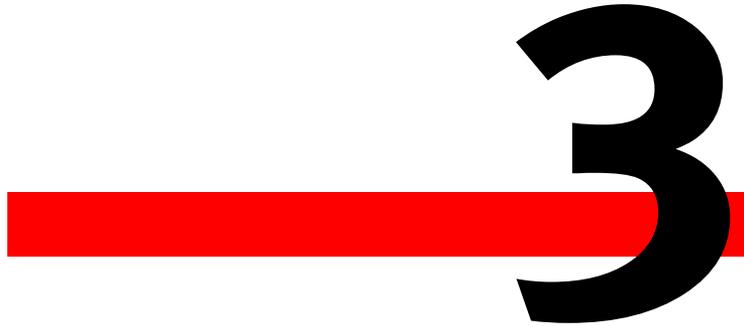
<p>Data Export MS Word 6.0 MS Word 4.0-5.1 (Mac) Unicode EMF/WMF HTML etc. via converters supplied with RagTime 5</p>	<p>Program Extensions for RagTime 5 e.g. Graphs and polygons Others are being developed</p>	<p>Data Import MS Word 2.0/6.0/95/97/2000 MS Word 4.0-5.1 (Mac) RTF, Unicode, dBase Excel Spreadsheets via converters supplied with RagTime</p>
<p>Data Import from Excel Spreadsheets</p>		<p>Dynamic links to SQL-databases via RagTime Connect and ODBC</p>
<p>Picture Import of All Standard Formats TIFF, EPS, BMP, JPEG also from picture databases, including Cumulus</p>	<p>Scanning via TWAIN adapters</p>	<p>File Exchange with Many Popular Programs via Drag & Drop, or the Clipboard</p>

→ *Import and export*

Built-in and external converters modify various data formats, if necessary, so that RagTime can use them.

RagTime has versatile import and export features, allowing one to repeatedly use data that exist in only one place in the computer. Converters supplied with RagTime can read and write files in the following formats: Microsoft Excel, Word, EPS, PDF, RTF (Rich Text File), SYLK, XTND, PICT₂, and Text.

Various picture formats can be imported, i.e., EPS, different TIFF formats, JPEG, PNG, BMP, PICT₂ and DCS.



Learning RagTime in Three Steps

How RagTime Supports You  How Much Time Do You Have?  Three
Steps to RagTime  Step One: RagTime Fast  Step Two: RagTime Well
Planned  Step Three: RagTime Professional

3 LEARNING RAGTIME IN THREE STEPS

How RagTime Supports You

Friends told you about the special features of a new program. Besides that, you read a promising magazine article about the capabilities of the program and consequently bought it from your dealer.

Now, as it is on every Friday, a mountain of unanswered business letters are lying in your “To Do” basket. With great expectations, you start the program and—you are thunderstruck by the view of multitudinous buttons and functions. Just “winging it” seems hopeless to you. Training must wait.

So, get out the typewriter and...

The training provided here should save you from such a situation. That’s why we ask...

How Much Time Do You Have?

If you have already been working with computers a while, you know that the total time expended to finish one document is the sum of (among other things) the time needed to create the document and the time needed to revise it—and you always have to revise.

The more time you take to plan a document, the greater the chance that the effort to revise the document is minimal—if the program supports you in this respect. And RagTime does. Consequently, this training manual introduces RagTime to you in three steps (chapters 4, 5, and 6) based on the amount of time you have to plan a document.

Three Steps to RagTime

→ The exercises 1 through 4 (in chapter 4) are especially intended for the cases in which you need fast results. They are directed toward the hurried user with no RagTime experience, who wants a quick introduction and for whom the revision time required for the document is of secondary importance.

→ The exercises 5 and 6 (in chapter 5) require somewhat more time for the conception of the document. RagTime rewards this expenditure with increased comfort when you later use and revise the document.

→ In the concluding exercises 7 and 8 (in chapter 6), two projects are presented for which it is worthwhile to spend more time on planning and design. With these two exercises, we want to give you a few suggestions about how to continue.

This training manual leaves it for you to decide how perfect the documents you create are in form and content. The multitude of layout features that the program offers is sure to surprise you. The on-screen help will provide further stimulus.

The time spent on a document may be estimated with the following formula:

Total time = $[(Co_t + Cr_t)R]P$

Co_t = Conception time

Cr_t = Creation time

R = Revision factor

P = Personal perfection factor

We don't have the ambition in this training manual to familiarize you with all of RagTime's features and variations in one giant leap. But the first small steps are the most important. For this reason, the examples are intentionally kept simple. Mastering the program takes some time.

The RagTime novice should in any case take the three steps in order. The practiced RagTime user, on the other hand, can skip parts of the training without problem and turn directly to, for example, chapter 6.

Step One: RagTime Fast

"Fast" documents are, for example, the letter that has to go out now, or the bid that the customer is waiting for. They are model cases for so-called "one-page" documents.

Situation: You don't have a form available but you must, for example,

- write a letter quickly,
- compose a memo in a hurry,
- calculate a bid right now,
- perform a one-time-only statistical evaluation.

Recommendation: chapter 4 - the one-page RagTime document

- 4.1 How to create a one-page document
- 4.2 A simple business letter
- 4.3 A simple spreadsheet
- 4.4 Sales department statistics
- 4.5 A package design

A one-page document is the right choice when quick solutions without much planning are needed in "hard copy." Since changes are, as a rule, time consuming, they should only be used in one-time-only cases like those described.

One-page documents are particularly appropriate for getting a first, quick grip on the program because they are uncomplicated and generally have a simple layout.

Step Two: RagTime Well Planned

Forms which you frequently use should be well thought out, since changes in them are generally undesirable. Typical cases for this category of documents are business letters for extensive bids, forms for comparing bids and, not to be forgotten, forms for invoices and requests for payment.

Chapter 5, devoted to documents from this group, focuses on using RagTime stationery pads. Stationery pads are generally highly structured documents which are always used in the same form. They are comparable to a pad of forms from which pages are torn as needed. Stationery pads have always been RagTime's special territory.

Situation: You need uniformly designed, reusable forms which are subject to minor changes, for example, for

- business letters of several pages,
- spreadsheet calculations,
- invoice forms.

Recommendation: chapter 5 - the RagTime stationery pad

- 5.1 How to create a RagTime stationery pad
- 5.2 A business letter of several pages
- 5.3 A simple invoice

Step Three: RagTime Professional

Extensive documents with a layout containing various elements have their perils. Keeping an eye on them requires long experience.

In practice, just such documents must be updated frequently. Changes must be made in both the form and the content of the document. Some changes affect the entire document while others affect only single parts. To fulfill these demands, RagTime provides you with master pages.

Master pages are templates for a document of arbitrary structure and their potential goes far beyond the RagTime stationery pads (chapter 5). The document may be seen as an electronic copy of the master pages. Changes in the master pages are made immediately in the dependent document. This dynamic connection between the two substantially simplifies necessary changes and saves time. As you become more experienced in using RagTime, you will learn to appreciate this feature.

Situation: You need complex documents which are subject to frequent changes, for example,

- price lists,
- catalogs and advertising brochures,
- planning documents (flow charts, organizational charts, and so on),
- documents for company training,
- technical instructions and descriptions.

Recommendation: chapter 6 - the RagTime master layout

- 6.1 How to create a RagTime master layout
- 6.2 A price list in a spreadsheet
- 6.3 Training documents

4

Step One: RagTime Fast

Creating a One-Page Document ◉ Exercise 1: Business Letters Made Easy ◉ Exercise 2: RagTime Does Your Calculations ◉ Exercise 3: Success in the Sales Department ◉ Exercise 4: Packaging Sells Products—Designing a Package ◉ Highlights from This Chapter

4 STEP ONE: RAGTIME FAST

4.1 Creating a One-Page Document

Goals This section describes how to start RagTime, how the screen looks initially and how the various elements that you see work.

You will start the on-screen help program and learn to use it. You will learn to differentiate between containers and components and to work with them.

You will use various containers and discover their role in our concept, “everything on one page.”

Starting RagTime



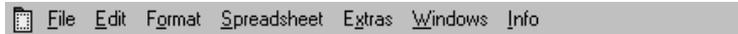
There are many ways to start RagTime. A frequently used option is to launch RagTime using the **START** button. To do so, click **START** and select RagTime by unclustering the following menus: **START** → **PROGRAMS** → **RAGTIME**. RagTime will start as soon as you release the mouse button when the pointer is above the RagTime menu item. By the way, to facilitate navigating, the last menu will include the RagTime icon shown on the left beside the “RagTime” entry. Please refer to the facing page for other ways to start RagTime. We’re sure you’ll soon pick your favored method and stick with it.

What You See

The RagTime program environment will appear shortly after you start RagTime. The key elements from top to bottom are:

→ The blue title bar displaying the program’s name, “RagTime 5.0,” and the new document’s preliminary name “Untitled 1, Layout 1.”

→ Underneath you will find the menu bar. You will recognize the first two items on the menu, **FILE** and **EDIT**, as well as **INFO**, from other Windows programs.



The other menus, **FORMAT** and so on, belong to RagTime, although the menus **FILE** and **EDIT** also include a few RagTime commands which we will come back to later.



→ Below the menu bar, you will find a tool bar that houses a number of buttons. We will revisit them in more detail later on as well.

→ The fourth part, below the menu and tool bars, is the actual RagTime window. You will find some familiar elements here as well as some requiring explanation.

B Other ways of starting RagTime:

➤ Program alias on the desktop

Using the Windows Explorer, drag the RagTime program icon from the “RagTime” folder onto the desktop. You have just created an alias, i.e., a link to the program icon on your desktop. Aliases can be identified by the small arrow in the bottom left-hand corner of the icon. To start RagTime, simply double-click this icon.

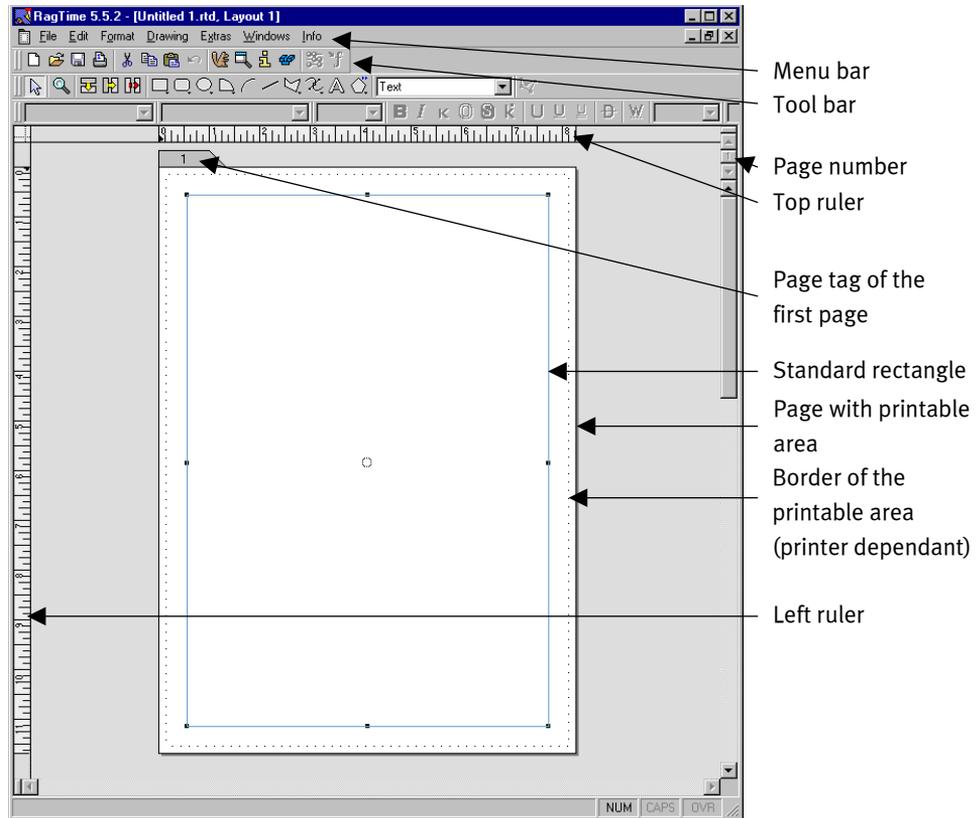
➤ Alias in the “Startup” folder

In the Windows Explorer, click on the RagTime program icon located in the “RagTime” folder with your right mouse button and select COPY. Then, locate the following folder: C:\Windows\Startmenu\Startup. Click the Autostart folder icon with your right mouse button and select INSERT. You have just added an alias to your Startup folder that will cause RagTime to start every time you boot up your Windows system.

Keep an eye on the menu bar when working with RagTime 5. It contains the standard menus and, next to the format menu, one which changes according to the circumstances.

Like the menu bar, the tool bar contains some commands that are always available as well as others which change according to the circumstances.

In the top right-hand corner, you will find the typical fields to MINIMIZE, MAXIMIZE, and CLOSE windows that also apply to the document we're working on. The window's bottom and right borders end in scroll bars. Other standard elements are described in your Windows documentation.



RagTime elements include the rulers along the left and top edges. The illustration shows them in inches. The portion of the ruler that you see depends on the size of the screen and selected paper format—here, a US letter-size page appears in the illustration.

On top of the long scroll bar in the right border, you will find buttons you can use to jump from page to page. The buttons have triangles pointing up (page back) and down (page forward). They frame a small box indicating the number of the active page, which is page 1 in our example. The page number is also shown on the tag at top-left.

The layout window depicts a page of paper which you can now design as you wish. The dotted line appearing on the page indicates the printable range. The printable area may be larger or smaller, depending on your printer. Anything outside the dotted line will not be printed!

Printable area →

B When launched, RagTime 5 always attempts to recreate the conditions prevailing when the program was last quit. If this is not the first start of the program, it may appear differently on your screen.

B The illustration on the adjacent page is from a portrait monitor. The window may look different on your screen, depending on its size and configuration.

The size and appearance of the window displaying a paper page also varies depending on the selected orientation (portrait or landscape) and the monitor scaling set in the **WINDOW→DISPLAY SCALE** menu (10%-800%).

B Go to page...

Double-clicking on the page indicator between the triangles in the right scroll bar reveals a dialog box you can use to jump to a specific page. Try it out once you have created a document with multiple pages! (Once a document contains several layouts, you will realize that the program will only let you jump around within the active layout—more on this in a bit.)

The layout window also contains an active rectangle which is used to display new documents in its default setting. It is immediately available for entering text as soon as a new document is created. However, you can tell RagTime to change its functionality if you wish.

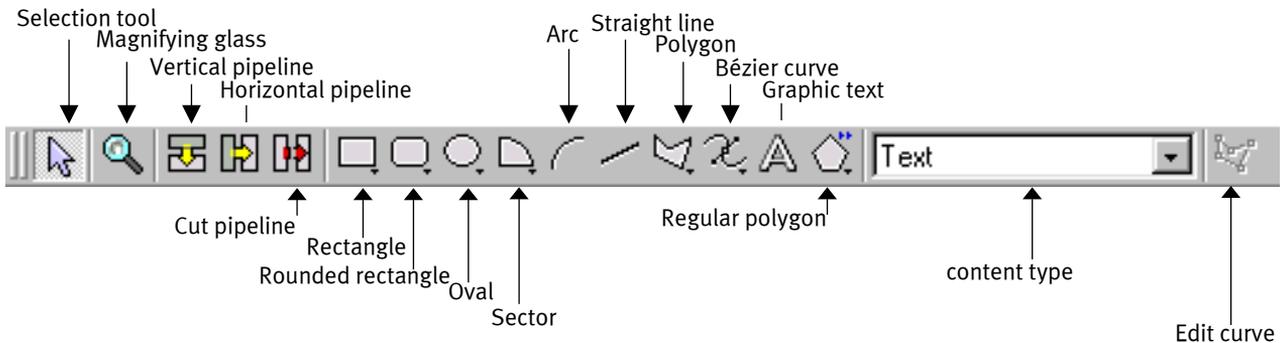
On-Screen Help

Should you become stuck, RagTime offers two sorts of immediate help. For example, if you don't remember exactly what one of the elements does, then place your pointer on top of the program component (tool, tear-off menu, etc.) and leave it there until a small yellow field appears. It will display the name of the program element.

Detailed information on RagTime's full range of features is available under **INFO** → **REFERENCE**. Here you will find RagTime's complete on-screen manual in which all aspects of the program are discussed in detail. The entries are all cross-referenced via links so you can quickly access related information. It pays to take advantage of this handy feature especially while getting acquainted with RagTime. The **INFO** menu also provides access to books that address other aspects of RagTime. Please refer to the adjacent page for additional information on our on-screen help.

The Tool Bar

Before you get your first practical experience with RagTime, we will briefly introduce the most important tools, available in the tool bar, for working with layouts and drawings.



Drawing Rectangles

To obtain an empty page, delete the existing active rectangle by pressing the **DELETE** key.



1. Select the **RECTANGLE** tool by clicking the icon in the tool bar once. Notice that the pointer changes its form to crosshair when you move it back over the page.

B / A If you are using several printers or a printer and a fax modem, RagTime 5 always shows the printable area of the currently selected printer. You can choose another printer in the **START** → **SETTINGS** → **PRINTER** menu.

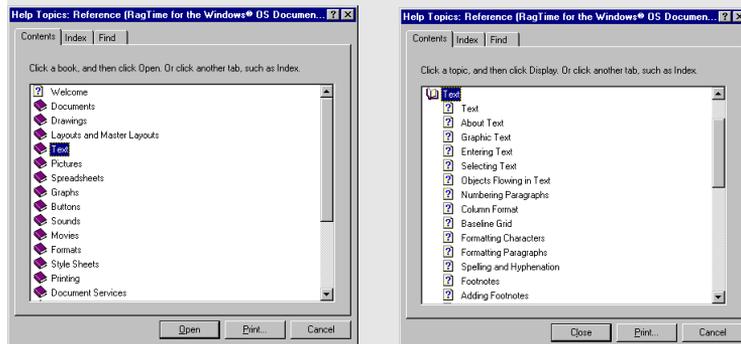
B / A RagTime's on-screen documentation is divided into several electronic books which you can access via **INFO** → **REFERENCE**, etc. The documentation includes for example:

→ **REFERENCE**. Contains a comprehensive explanation of RagTime's full range of capabilities and features. Recommended for basic users as a supplement to this Training Manual from time to time to learn about some more of RagTime's capabilities and how to make use of them.

→ **FORMULAS AND FUNCTIONS**. Interesting to RagTime users who would like to learn to use mathematical, layout, button and standard functions.

→ **PRINTING HTML**. Contains notes on the HTML output generated by RagTime documents. Primarily suitable for advanced users.

The on-screen help is divided into chapters marked with a book icon



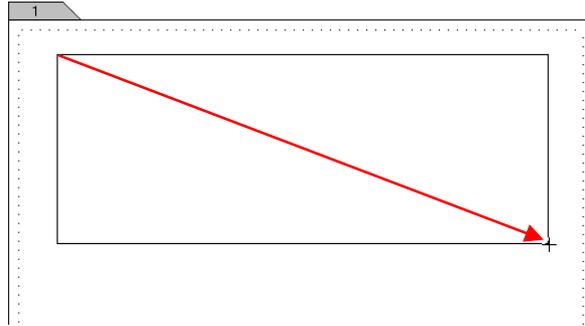
and sections on individual topics flagged with a question mark. These electronic books feature panels with search aides and color-coded hyperlinks included directly in the text that you can use to navigate through the help. These electronic cross references give you instant access to additional information on a certain topic.

Please note that full text searches are also possible.

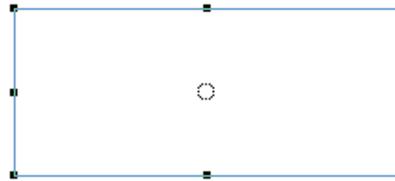
Please refer to your Windows documentation for additional information on the basics of the on-screen help.

B You can do two things with the **CONTENT TYPE** tool. It can be used to determine the type of content to be included in a rectangle or other container. Additionally, it doubles as an indicator to determine the type of content included in a selected object if you're uncertain of its content.

2. Drag, that is, click and move the crosshair pointer while holding down the mouse button, diagonally across the page and release the button.



The following rectangle becomes visible.



What has happened? You have just created your first drawing object. Just as you drew a rectangle with the rectangle tool in this example, you can create other objects, for example, OVALS, SECTORS, ARCS or LINES, with the appropriate tools.

What was the point of this? However simple it may be, you have created a drawing on a page of a layout.

In RagTime, not only can you draw objects, you can fill the drawing objects with contents such as texts or pictures, converting the objects to containers.

A container is any object which contains a component, such as a text, a picture, and so on.

Container →

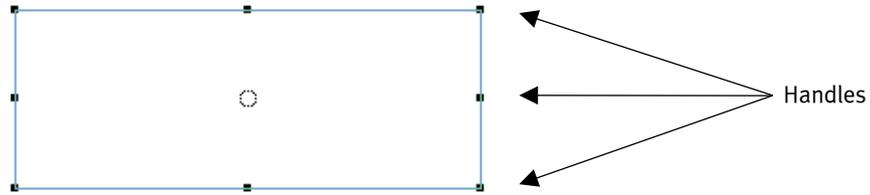
Selecting and Moving Drawing Objects

The object which you just drew has eight “handles,” providing that you have not clicked elsewhere after releasing the mouse button.

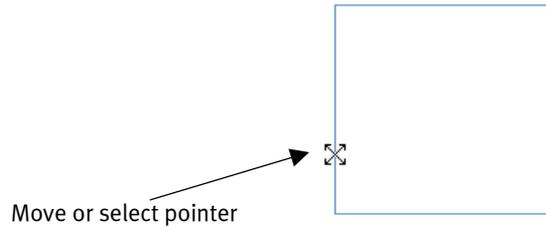
When these handles are visible, you can manipulate the object in various ways.

A Many tools are built into RagTime 5, while others may be installed as external extensions. Therefore, the tool bar may contain more or fewer tools than shown in the illustration. The tool for drawing regular polygons, for example, is an external extension. If you want to experiment, you can remove it from the folder “Extensions”, restart RagTime 5 and check the tool bar.

A If you hold the ⌘ key while dragging open a rectangle, it will become a square. The ⌘ key has the same limiting effect when used in conjunction with other tools in the same manner.



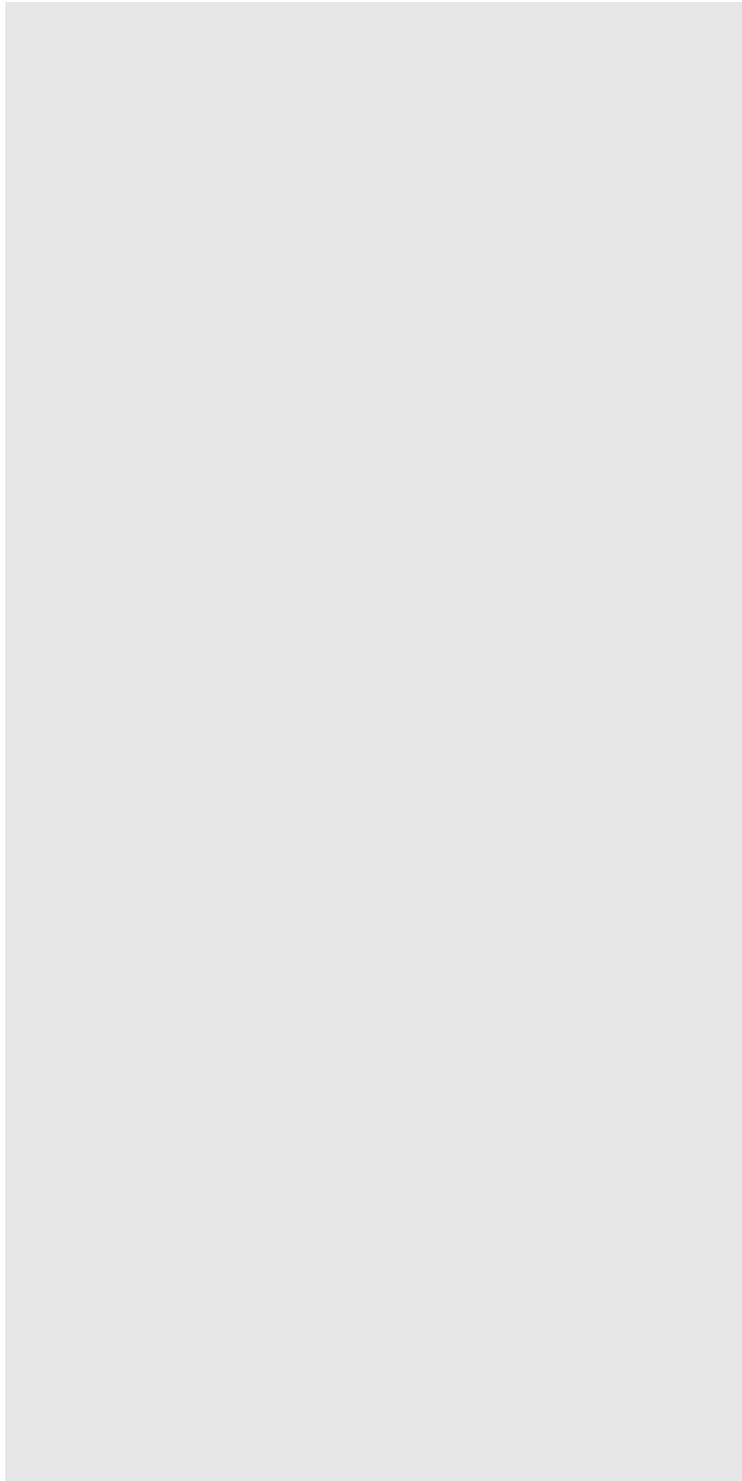
3. First practice selecting and deselecting an object.
 If the handles are visible, click somewhere just outside the dotted lines, so that the handles disappear.
 To select the object again, move the pointer, this time without pressing the mouse button, somewhere inside the rectangle. Notice that the pointer changes its form. The result should look something like this:

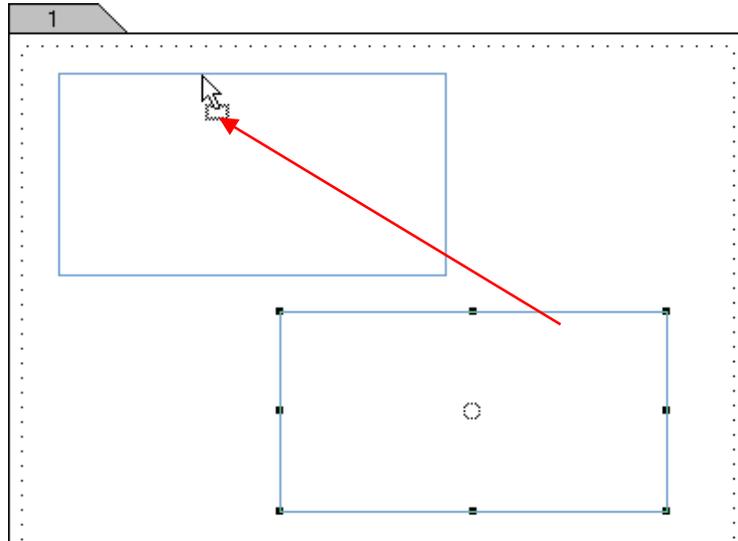


When the move pointer becomes visible as a large X, press the mouse button. The handles appear, indicating that you have selected the drawing object and can now manipulate it. To deselect the drawing object, click outside of it.

4. Now try to place the pointer exactly over the border of the drawing object outside of the 8 handles. Click and drag it. You will notice that the pointer turns into a hand. We will need to use this technique later.
5. You can move a selected drawing object by moving the move pointer in the desired direction. The pointer again becomes a rectangle with an arrow attached to it. A “ghost” object moves with the pointer for your orientation. When you release the mouse button, the object reappears.

← Important extra practice





Duplicating and Deleting Drawing Objects

6. You often need several identical drawing objects, as you will in a later exercise. It would not be very efficient to draw each object separately; instead, you can duplicate an existing object. RagTime offers several ways to do this:

→ Select an object. Then choose the **Duplicate** command from the **Edit** menu. A duplicate of the drawing object will appear on top of the selected rectangle. Move the duplicate to the desired position on the page.

→ Select an object and keep the mouse button pressed. Press and hold down the **CTRL** key. Move the ghost object to the desired position. When you release the mouse button, the duplicate becomes visible.

7. If the results are not as you had hoped, you can easily delete particular or all drawing objects. To do so, select the appropriate object and press the **DELETE** key.

Enlarging and Reducing Drawing Objects

A drawing object you create rarely has exactly the size you need. But changing its size is no problem. To modify the dimensions of an object, proceed as follows:

8. Select the object. The handles appear.

9. Position the pointer exactly over the middle handle on the side that you want to adjust, for example to drag out and enlarge the object. The

B / A You can restrict the direction that you drag objects to vertical or horizontal by pressing the Shift key (⇧). This is handy because you don't have to control the mouse so precisely.

A To align several identical objects evenly, you can set the distance interval among the newly created objects under **DUPLICATION OFFSET** in the **EXTRAS** → **SETTINGS** → **DRAWING** panel

A When you duplicate an object, move it, and immediately duplicate again, RagTime 5 notes the distance that you moved the first duplicate and applies it to subsequent duplications. Try it out and you will notice that this method works only if you don't select another object between duplications.

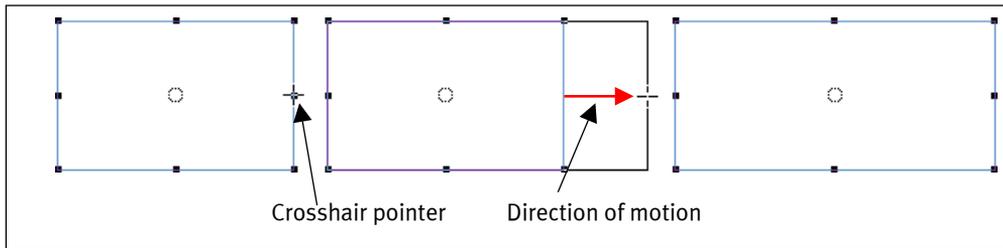
B You can use keyboard shortcuts for many commands in RagTime 5. Shortcuts appear in the menus next to the commands. You can also use a shortcut to duplicate an object:

Select an object. Press the key combination **CTRL+D** (press “D” while holding down the **CTRL** key). Move the duplicate that appears to the desired position

B Many users have a personal preference when it comes to working exclusively with the mouse or using keyboard shortcuts once in a while. Since certain keyboard shortcuts are used by many other programs, you will probably memorize **CTRL+S** (**SAVE DOCUMENT**) in no time and use it to save documents “on the fly.”

pointer changes to a crosshair.

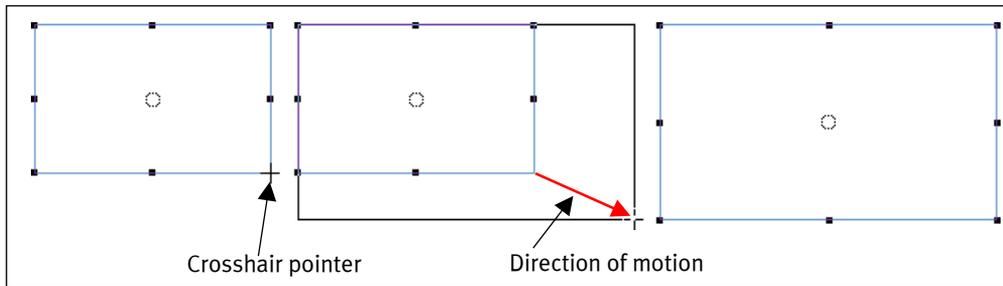
10. Drag the handle outwards. The drawing object is enlarged. (See the illustration.)



In an analogous manner, you can enlarge the object to the left, top or bottom. Likewise, you can reduce the object by moving a side inward.

The four corner handles act in a similar manner. Whereas dragging a middle handle lengthens or shortens opposing sides, dragging a corner handle lengthens or shortens the adjacent sides.

The three phases in this case, again an enlargement, appear as follows:



This concludes the brief introduction to drawing objects. We will return to this subject later.

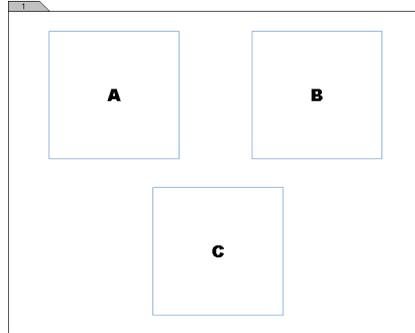
Now is a good opportunity to take a break. Next, we will take a look at the contents that can be inserted into a drawing object.

A The round handle at the center of a drawing object can be used to rotate it. Wait until chapter 5.3 for an explanation or experiment on your own now: click on the handle, slightly move the pointer away from the object, and move the mouse up and down slowly. The ghost frame will help you keep track of where you're going.

B / A RagTime maintains the proportions of a drawing object when you drag a corner handle while holding down the Shift key (⇧).

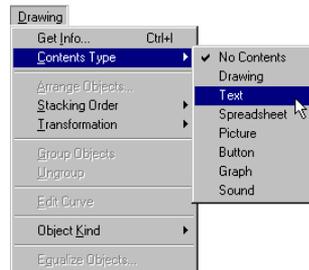
Using Drawing Objects as Containers

So far you have only used the drawing tools to create drawing objects. The next step is to determine what contents should go in the objects. First delete all the objects that you have drawn on the page. (Select them and press the DELETE key.) The page should be empty, but the printable area remains visible.



11. Draw rectangles: draw the three rectangles A, B, and C as in the illustration.

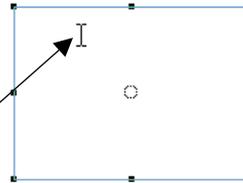
12. Install text: click in rectangle A so that the handles appear and choose the command DRAWING → CONTENTS TYPE → TEXT.



Your action had no apparent affect, but this impression changes when you move the pointer over rectangle A without pressing the mouse button.

The arrow pointer changes to a text pointer (I), indicating that text can be entered in the object under the pointer.

13. Enter text: click again while the text pointer is over rectangle A. The rectangle is now prepared for text input. Notice that the pointer has changed again. The text pointer has become an insertion marker (I) that you may be familiar with from other word processors. Now type a sentence, e.g., "This rectangle contains text."

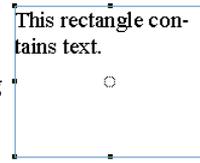


B / A As you have no doubt noticed, after you have drawn an object with the `RECTANGLE` tool, the `SELECTION` pointer is automatically active again. This is usually handy, but a nuisance when you want to make several objects with the same tool.

To draw a number of objects with the same tool, press `CTRL` while clicking to determine the first point of the new object. The tool used last is then used again *without* your first having to select the tool in the tool bar.

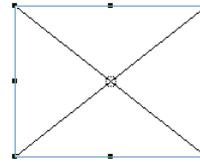
The result should look something like this:

Having done this, you will have no trouble filling rectangles B and C with other contents.



14. Installing a picture: Drag open a roughly identical rectangle beside rectangle A using the RECTANGLE tool. Then select PICTURE from the CONTENT TYPE tool. The drawing object contains an initially empty picture.

Here's the result:

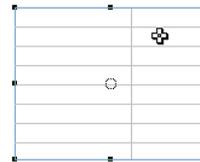


To learn how to insert a picture in the rectangle turn to the explanation in section 4.2. Please be patient. The focus here is preparing drawing objects to accommodate contents.

But please keep an eye on the pointer when you move it over a drawing object.

15. Installing a spreadsheet: Use the RECTANGLE tool once again to drag open a frame. This time, however, hold the mouse button down a bit longer while the pointer is over this tool. This will pop open a menu with which you can directly determine the content type before the drawing object is even created. Select the SPREADSHEET content type and draw rectangle C. The drawing object now contains a spreadsheet.

Here's the result, once again:



The illustration shows the typical structural elements of a spreadsheet, rows and columns, as well as the characteristic spreadsheet pointer. You will learn more about spreadsheets in section 4.3.

At this point, we must draw your attention to something important!
 Click outside all the objects or on the TOOLBOX located in the tool bar.

B / A Because installing text in a container is a very common procedure, RagTime 5 offers a shortcut: if an *empty* object is selected (the handles are visible), you can simply start typing. The `CONTENT TYPE` of the object is automatically set to `TEXT`, the installed text component is active, and you can enter and edit the text.

This makes the drawing tools reappear. You can select any tool and begin drawing.



→ Click the text in rectangle A and look at the tool bar. It appears as follows:



A lot has changed. We will look into this in detail later.

→ Now click the picture in rectangle B. Picture tools appear in the tool bar.



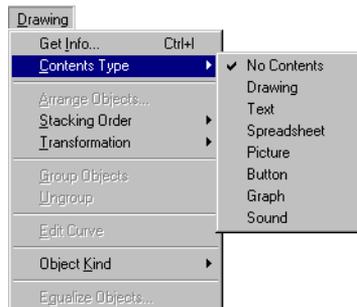
→ Finally, click the spreadsheet in rectangle C. The spreadsheet tools appear.



→ *Context sensitive tool bar*

The important point is that any time you click in an object with contents, the tool bar changes according to the situation. RagTime makes sure that the tool bar always provides tools which are appropriate to the environment.

Take another look at the CONTENT TYPE menu. In addition to TEXT, SPREADSHEET and PICTURE, you will see a number of other choices.



B Additional information on all tools can be found in the Reference Manual and the on-screen help.

.....> Content Type: No CONTENTS

If you want to use drawing objects only as elements of illustrations without assigning them any special contents, leave the setting No CONTENTS. The advantage is reduced storage and memory requirements. RagTime needs only to save geometrical shapes, which makes the document significantly smaller.

.....> Content Type: DRAWING

If you assign the contents type DRAWING to a drawing object to, you can make a drawing inside the container. This has all the advantages inherent to containers. You example, you can copy the drawing by copying the container. You can move the drawing by moving the container. You can distort the drawing by distorting the container, and so on.

.....> Content Type: TEXT, SPREADSHEET, and PICTURE

These contents types were discussed above.

.....> Content Type: GRAPH:

“Graph” is a collective name for the many possibilities RagTime offers to represent values in informative graphic displays. You can often present values more meaningfully in column, bar, line, point, or multiple value axes diagrams, to name just a few.

.....> Content Type: BUTTON

A BUTTON is yet another content type. You can use it to perform tasks such as printing, sorting, etc. within your document. You can make your buttons non-printable so they don't interfere with your print-out. Unfortunately, we've run out of space, so we can't give you further details on this feature. Please refer to our on-screen documentation under INFO.....>REFERENCE for more information.

.....> Content Type: SOUND

Last, but not least: SOUND. You can use this content type to add audio capabilities to your document. Once again, space limitations prohibit us from elaborating on this type of content. Please refer to our on-screen documentation under INFO.....>REFERENCE for more information.

This is another good opportunity to take a break!

The objects which you have drawn so far are all on a page of a layout. You can, however, install a drawing component in a drawing object by choosing CONTENTS TYPE.....DRAWING. The differences between the ways of drawing and how to take advantage of them are explained in exercise 4.

4.2 Exercise 1: Business Letters Made Easy

Goals the form of a business letter (see the illustration) using basic techniques. Every step in this example is described in detail. The commands and techniques shown here will be used in later exercises without further comment, in order to concentrate on the new material.

The illustration depicts a RagTime page which contains various drawing objects having different contents, called “components.” Please examine the illustration carefully so that the objective will be clear to you.

The letter consists of five texts and one picture. The container borders do not appear in print. You can also make them invisible on the screen if you want to see how the finished letter looks in print. Use the command `WINDOWS→SHOW→NONPRINTING ITEMS`. The command switches between on (✓) and off (no ✓). Try it out.

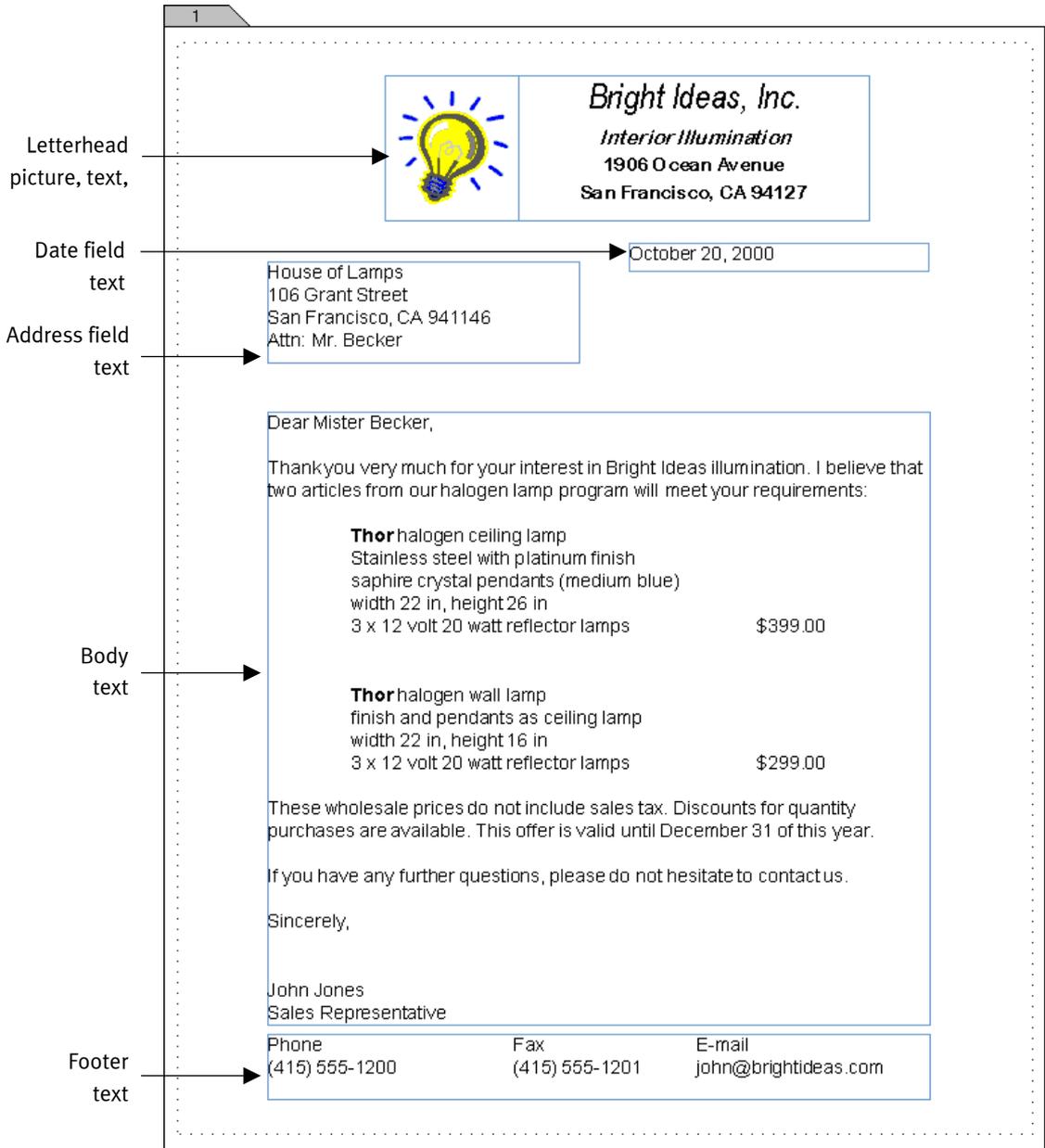
Once you are familiar with the goal of the exercise, you can create and position the objects, and then fill them with contents.

That means

1. Structure the layout of the letter on a page having standard letter size.
2. Write the texts in the intended places and format them.

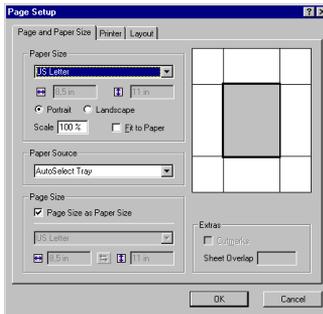
Beginning a New Document

Choose `START→PROGRAMS→RAGTIME→RAGTIME` or your preferred method to start the program. If RagTime is still running from the last exercise, choose the command `NEW DOCUMENT` from the `FILE` menu. A window containing a layout and standard rectangle appears, and the tool bar contains layout tools.



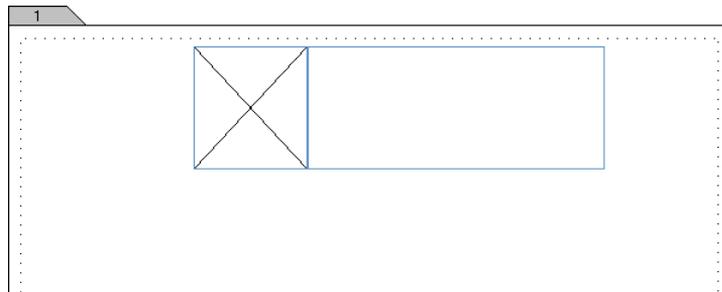
Determining the Page Setup

Make sure that the correct paper format, in this case, US Letter, portrait, is selected under the command PAGE SETUP in the FILE menu.



The Containers for the Letterhead

1. First of all, we want to roughly adjust the standard rectangle that appears with every new layout so it is ready to accommodate the body text. This should also free up the space needed for letter components at the top of the page. To make work easier, set the display scale to 50% under **WINDOWS** → **DISPLAY SCALE** → 50% for the time being.
2. Now reduce the standard rectangle so that it occupies the bottom half of the page as in our example. To do so, place the pointer on the top center handle. It will turn into a cross, indicating that you can reduce the frame's size by dragging downward. Once the rectangle has been adjusted to the desired height, restore the original, 100% scaling by selecting **WINDOWS** → **DISPLAY SCALE** → 100%. If necessary, move the rectangle up a little to free up space to insert company information in the footer.



3. Click on the **RECTANGLE** tool on the tool bar and create the two rectangles for the company name and logo as shown in the illustration.
4. Assign the content type **PICTURE** to the left rectangle and **TEXT** to the right one. (Remember how to do this? Select a rectangle and assign the desired attributes under **DRAWING** → **CONTENT TYPE** → (YOUR CHOICE) from the menu bar or the **CONTENT TYPE** tool.) Check to make sure your results match our example.

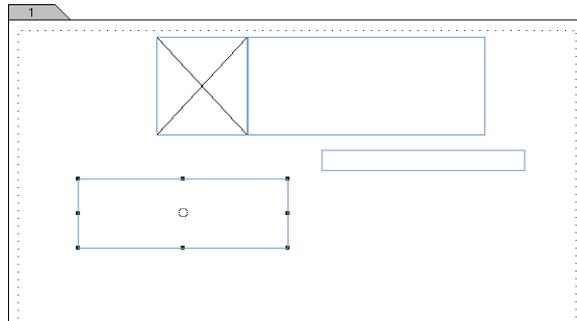
The contents of the dialog box depend on the printer being used, so they may vary from the illustration. In case of doubt, please refer to your printer's documentation.

Creating and Positioning the Date Field

5. Click on the RECTANGLE tool in the tool bar and hold down the mouse button for a while until a pop-up menu appears. Select the content type TEXT.
6. Draw a rectangle where the date is to appear, below the letterhead, with the left side of the rectangle approximately in the middle of the page. Make sure the rectangle remains selected.

Creating and Positioning the Address Field

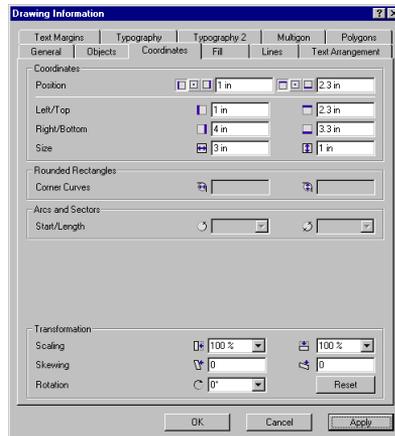
7. Click on the RECTANGLE tool in the tool bar and hold down the mouse button for a while until a pop-up menu appears. Select the content type TEXT.
8. Draw a rectangle in the approximate position of the recipient's address. Make sure the rectangle remains selected.



9. Call up the information dialog for this drawing object by selecting DRAWING→GET INFO from the menu bar. This will reveal the DRAWING INFORMATION panel.



10. Choose the COORDINATES panel.





The Information Dialog

You can also open the DRAWING INFORMATION dialog box with the appropriate button in the tool bar

Double-clicking most drawing objects also opens the DRAWING INFORMATION dialog box. Exceptions are the drawing objects which can be edited in parts, that is, those which permit subselections. This group includes polygons, Bézier curves, and graphic texts. Double-clicking these objects activates the editing mode. You can change this behavior in the DRAWING panel of the dialog box opened by EXTRAS→SETTINGS.

If a component (a text, a picture, and so on) is already installed in a drawing object, please double-click the border.

If you're not certain of the effect your entry will have, select APPLY first. RagTime will take your entries into consideration. However, if your entries do not generate the result you intended, you can reinstate the original value or enter new ones. The APPLY command can also be used to make changes in several of the information dialog's panels without having to call up the dialog repeatedly.

A Contextual Menus

The program features so-called contextual menus depending on the objects you are working on within RagTime. They pop up when you press your right mouse button anywhere within your current working environment.

RagTime recognizes the context in which you have clicked and reveals the corresponding menu. They (almost) always contain two elements:

→ Contextual menus let you access the selected object's information dialog.

→ Contextual menus contain the following commands, which can also be found in the EDIT menu: CUT, COPY, and PASTE. Exceptions are made when such commands are useless in the active work environment.

Contextual menus aim to make frequently used functions available "on the fly," eliminating the need for time-consuming mouse operations. Try this out and make a mental note of the contextual menus that make your work easier. Contextual menus are also used in the Windows operating system and other programs.

Assuming that you want to send your business letter in a window envelope, enter the settings in the panel as shown in the illustration. The rectangle jumps to the correct place and has the correct dimensions. Fast and easy, wasn't it?

The Body of the Letter

11. Adjust the height of the body of the letter, if necessary.
12. Use the DRAWING INFORMATION dialog box, if needed, to position the rectangle 1 inch from the left edge of the page.

The Footer with Contact Information

13. Select the RECTANGLE tool from the tool bar and set the content type to TEXT in the tool bar.
14. Draw a rectangle of the desired size for the letter's footer.
15. Use the DRAWING INFORMATION dialog box, if needed, to position the rectangle 1 inch from the left edge of the page.

Now that you have laid out the page with drawing objects and installed components in them, you can begin filling the components. Start with the easiest: insert a picture.

Where Can You Get the Company Logo?

- Of course, the letter doesn't have to have a logo when time is short. But, as you will see, you can get one fast if a finished picture is available.
-> You might have one done by a graphic artist and supplied on a disk, or
 -> You may have designed one yourself using a special program, or
 -> You may have ordered finished pictures from your dealer and modified them.

If you don't have a logo handy, you can use one supplied with RagTime. Our picture files are located in the "RagTime\Examples\Training" folder on your hard drive. Irrespective of whether you intend to use one of your own or RagTime's pictures, you need to launch the program required to process the file, i.e., the Windows Explorer.

A To help position objects, RagTime 5 provides a grid which you can turn on with the command WINDOW→RULERS AND GRID→SNAP TO GRID. For more information about creating and modifying grids, please refer to the on-screen documentation under INFO→REFERENCE.

If you want to position a number of objects precisely instead of opening the DRAWING INFORMATION dialog box, it is better to open a palette with the command WINDOWS→PALETTES→OBJECT COORDINATES. The palette can remain open on the screen and always shows the values of the selected objects. This way you can save repeatedly opening and closing the DRAWING INFORMATION dialog box.

To edit a value in the palette, click in the appropriate field. Complete an entry by pressing ENTER.

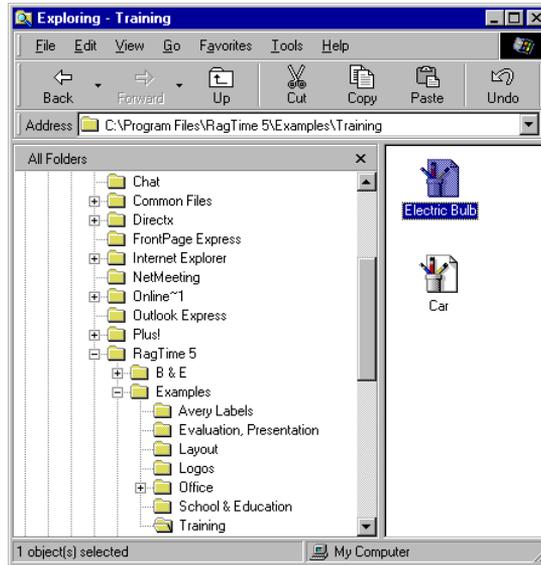


A You can place palettes anywhere you want on your screen. We'll come back to this later.

Creating a Company Logo from a Picture File

16. Choose **START** → **PROGRAMS** → **WINDOWS EXPLORER**. This will open the Explorer with the settings you used last. We will use the Explorer to import the picture of your choice into your RagTime document. To do so, drag and drop the icon of your picture of choice from its location in the folder hierarchy to the desired picture container.

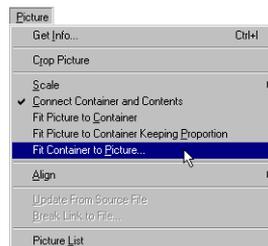
17. Before performing this operation, make sure both the Explorer and the RagTime windows are visible on your monitor side by side. If necessary, click **RESTORE** in the title bars to deactivate the respective program's **MAXIMIZE** mode. Then resize the programs' windows so they each take up approximately half the available monitor space.



18. Within the Explorer, select the folder which houses your picture or go to the "RagTime\Examples\Training" folder. Click on the picture of your choice or the file named "Electric Bulb" in the "Training" folder and drag the file icon out of the Explorer window and into the RagTime window and drop it into the rectangle set to accommodate the picture in the top right-hand corner.

19. The picture appears in the rectangle, retaining its original proportions.

20. Click on the picture to select it. To make the picture fill the container, choose **PICTURE** → **FIT CONTAINER TO PICTURE** from the menu bar. Your company logo is ready



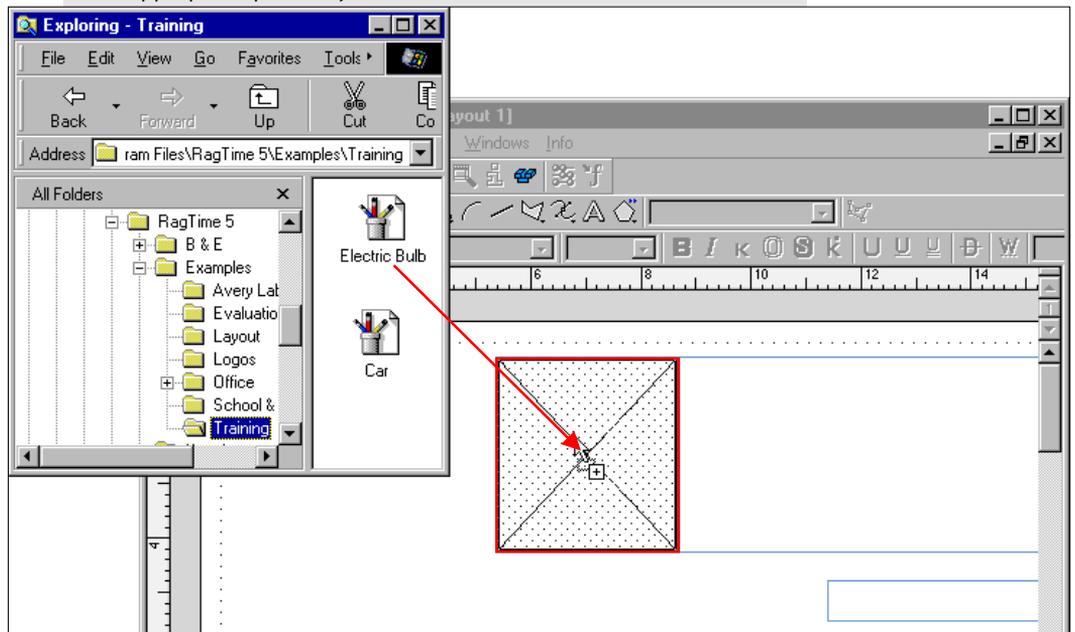
Formatting the Text of the Letterhead

In this step, we will work on the text of the letterhead.

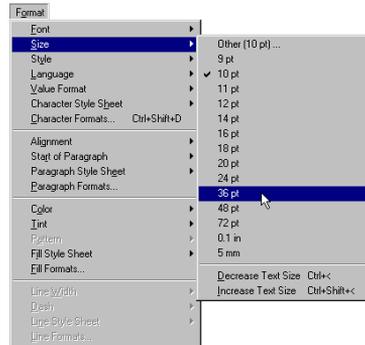
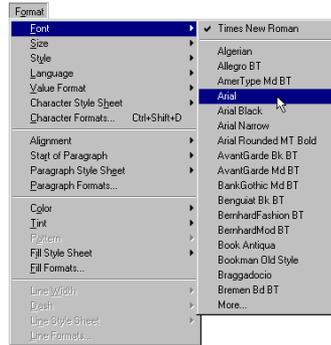
21. Click in the rectangle for the text. The insertion marker blinks in the upper left corner.

B / A You can also import picture files into a selected picture container via the FILE → IMPORT menu.

To transfer a picture, or anything else, from a folder to a RagTime 5 document, you can drag the object from its source folder in the Explorer to the appropriate place in your document.



22. Type “Bright Ideas, Inc.” and press the RETURN key (↵). Type “Interior Illumination.”
23. Select the text by dragging across it with the text pointer from beginning to end.
24. Choose, for example, ARIAL from FORMAT→FONT in the menu bar. RagTime will initially show a subset of the available fonts. To display additional fonts, click on MORE.
25. Choose, for example, 24 pt from FORMAT→SIZE in the menu bar.
26. Repeat the process for “Interior Illumination,” using a different font size and font, if necessary.
27. To center the text of the letterhead, select the entire text and choose FORMAT→ALIGNMENT→CENTER.



Completing the Date Field

28. Click in the date field.
29. Type the date as it appears in the example.

Completing the Address Field

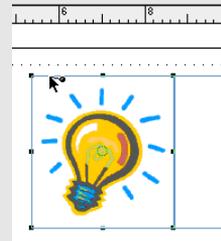
30. Click in the address field.
31. Press RETURN (↵) several times until the text pointer is at the height of the first line of text.
32. Type the address as it appears in the example.

You can prevent objects from accidentally being moved with the mouse. This is particularly handy, for example, when you work with your notebook in a moving vehicle.

Select the objects and choose the command EXTRAS→PROTECTION→FIXED.

You can still change the coordinates by entering new values in the DRAWING INFORMATION dialog box or the OBJECT COORDINATES palette. Only attempts to make changes with the mouse are rejected with an error message.

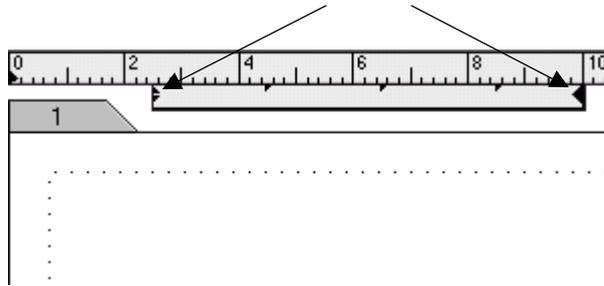
Fixed objects are identified on the screen with a pin through the arrow pointer



The font belongs to the character format, which you may set differently for each character. If you want to affect several characters, you must select them before changing the font. Character formats comprise the top section of the Format menu.

A If you want frequent access to different fonts and you haven't created any suitable paragraph style sheets, you can tear off the FORMAT→FONTS menu and place it on screen like a palette. To do so, hold the mouse button down for a while on a FORMAT→FONTS menu entry and slowly move the pointer sideways. A ghost frame will indicate the location of the FONTS menu palette

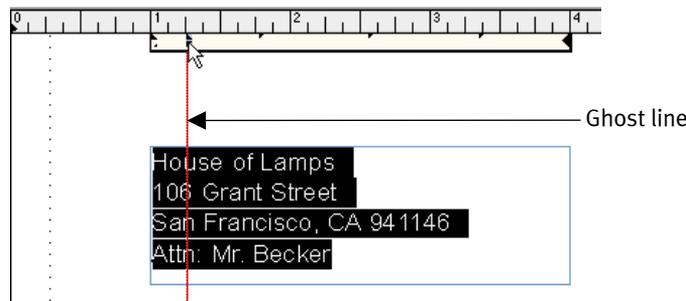
33. Below the ruler, a gray bar having the width of the text container is visible. In the bar, you will see left and right margin markers.



To make the address better visible in the envelope's window, you can move the text a bit to the right.

34. Click in the address field and choose **EDIT** → **SELECT ALL** from the menu bar. This insures that all paragraphs are included in the ensuing realignment.

35. Now move the arrow pointer precisely over the bottom left margin marker and drag it to the right holding down the mouse button. Ghost lines help you align the text.



36. Release the mouse button, click once to end the text selection, and look at the results.

Text for the Footer

The text data are entered in much the same way as in the address field. However, here a number of small blocks of text need to be entered.

To position these blocks, you need to use tabulators, predefined positions to which the insertion marker jumps when you press the tabulator key (→). Tabulators are particularly useful when words in several lines must be aligned in columns.

Alignment is part of a paragraph format. The selection must be in the paragraph of which you want to change the setting. If a number of paragraphs are to be formatted together, take care that you select them all by dragging across them with the pointer.

Paragraph formats always affect the entire paragraph; that is, all the lines of a paragraph must be, for example, aligned right. If you want to affect individual lines, you must divide your text into appropriate paragraphs.

The left margin marker has two parts. The upper half marks the left margin of the first line of a paragraph. The lower half marks the left margin of the remaining lines of a paragraph. When you move the lower part, the upper part moves as well. You can move the upper part independently. If you want to move the lower part independently, hold down the ALT key.



To set new tabulators, first select a type of tabulator, such as left aligned, centered, or right aligned, in the tool bar. Then click in the gray bar. Experiment with the tabulators.

Margins belong to paragraphs. Therefore, the selection must be in the paragraph of which you want to set the margins. If a number of paragraphs are to be formatted together, take care that you select them all by dragging across them with the pointer.

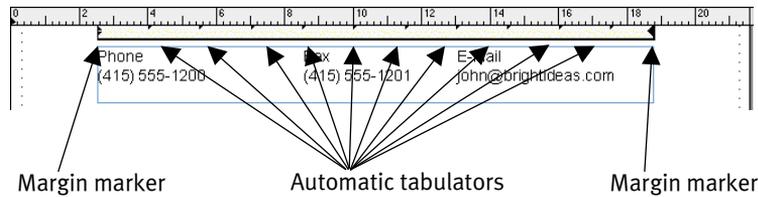
If the margins of all paragraphs of a text are to be adjusted, of course it is easier to use the command SELECT ALL than to select them with the pointer.

Never use blank spaces to align words, even though using tabulators may seem strange at first. Otherwise your printed document will be unusable, and revisions are difficult. Incidentally, this is true not just for RagTime but for all word processing done with computers.

Caution: Never use blanks to align text!

Aligning the Text of the Footer with Tabulators

37. Click in the footer rectangle.
38. The text tools appear in the tool bar, and under the ruler the margin and tab markers are visible. You can arbitrarily position different tab markers, but for this exercise the automatic tabs are sufficient.



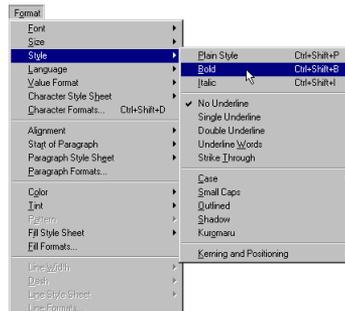
39. Choose **FORMAT** → **SIZE** → 9 pt. First type “Phone” and press **→|→|;** type “Fax” and press **→|→|;** type “E-mail” and press **↵**.
40. If you have inadvertently pressed the tabulator key once too often, correct the error with the **DELETE** key.
41. Type the telephone and fax numbers and e-mail address, using tabulators to align them with the corresponding titles.

The Body Text

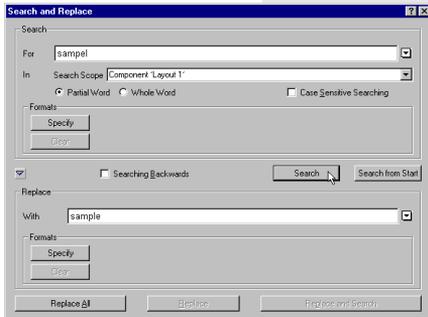
Now that you have done the preceding exercises, you can try out your knowledge on the last text.

42. Use the example letter for the body of your letter. Indent the product descriptions by pressing the tabulator key. Do the same with the prices.

43. You can use the **Format** menu to emphasize text, in this case the bold typeface used for the product names (**FORMAT** → **STYLE** → **BOLD**). The **FORMAT** menu lets you determine even more styles using options that are more deeply nested such as the **FORMAT** → **STYLE** → **KERNING AND POSITIONING** menu. Feel free to experiment!



B / A If you want to replace a word with another in a large document, you can save time by using the **EDIT** → **SEARCH AND REPLACE** dialog. To enter the term you would like to replace the search term with, click on the bottom left triangle and fill in the required fields. Please note that you can use the **SPECIFY** button to determine the format of the searchable term and set the range of your query in the **IN** field.



Arranging elements in the footer is easy with the tabulators. For more complex tables with lines or a number of columns, using a spreadsheet is usually advantageous because the column width and other settings are easier to change. The spreadsheet is an excellent tool for structuring tables even when you don't need to calculate anything. You will find examples in the following exercises.

Inventory



You have designed your business letter by drawing rectangles in a layout and installing various contents (texts and a picture) in them. These contents are called components in RagTime 5. They are displayed in drawing objects.

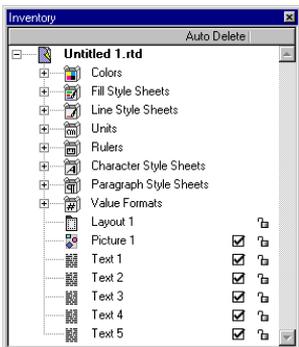
RagTime organizes all the components for you in the inventory. Open it with the command **WINDOWS** → **PALETTES** → **INVENTORY** or click Roderick the Squirrel in the tool bar. The inventory gives you an overview of the elements in the active document, i.e., auxiliaries such as style sheets or rulers and their components like texts or pictures.

You can flip inventory parts open or shut as you would in the Windows OS to reveal the part you're interested in. If you need additional space to view the inventory on your screen, enlarge the Inventory window by moving the window separator to the left. To hide the inventory, simply give Roderick another click!

The names of the components are assigned by RagTime. You can select and edit names just as you do with file names in the Windows Explorer.

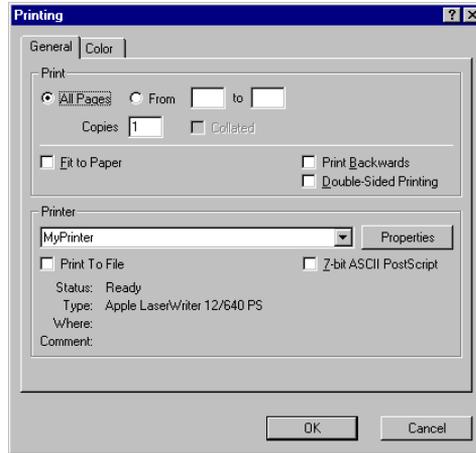
If you double-click the name of a component in the inventory, a window opens in which just that component appears, independent of its position in the layout.

You can achieve the same result in layout mode by selecting a component and then clicking on the **OPEN COMPONENT** tool.



Printing the Finished Letter

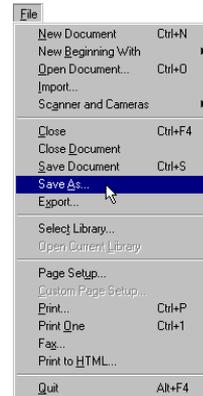
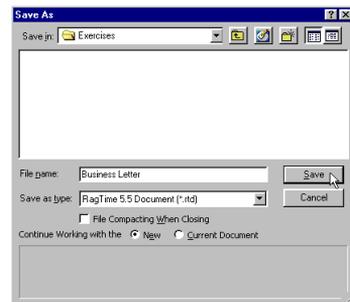
44. Choose FILE → PRINT from the menu bar.
45. A dialog box opens in which you can set various options for printing. The content of the dialog box depends on the type of printer connected to your PC, so it may vary from the illustration. If in doubt, please refer to the documentation for your printer.

**Don't Forget to Save**

You will find the save command in the menu bar under FILE.

46. Choose FILE → SAVE AS...

47. Enter the file name “Business Letter” in the space provided.



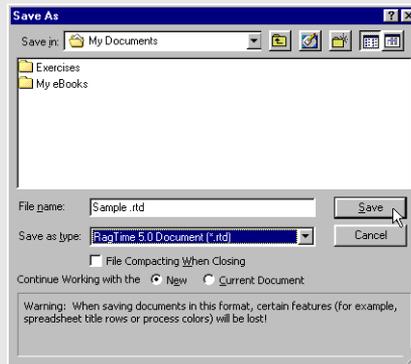
Please refer to your Windows documentation for detailed information about saving and naming documents. Windows allows you to use spaces to make file names more legible, e.g. “Letter Re Court Case Meyer vs. Meyer.” However, certain characters such as “/”, “?”, “!”, etc. cannot be used. More detailed information on this is included in your Windows documentation.

A When managing large documents, since the inventory’s components are arranged alphabetically, we recommend giving related components names that appear in sequence to gain a better overview. You can achieve this by assigning the same prefix to all the components belonging to the same layout, e.g. “Chap1 Layout,” Chap1 Pic1,” etc.



B If you have already printed a document during the active RagTime session and you would like to print the current document using the pre-selected printer without going through any further dialogs, simply choose FILE→PRINT ONE or click this button.

B If you would like to share documents with colleagues using RagTime 5.0.1, simply save your document as a RagTime 5.0.1 file using the FILE→SAVE AS dialog and choosing RAGTIME 5 DOCUMENT from the SAVE AS TYPE pull-down menu.



The button FILE COMPACTING WHEN CLOSING determines whether or not gaps created through deletion of document parts will be removed when the file is saved. This way documents which are regularly changed can be stored using less storage capacity.

Please note, however, that features such as title rows in spreadsheets and color style sheets that are only available in RagTime 5.5 cannot be used when working in RagTime 5.0.1 documents. A warning to this effect will pop up on your screen before you finish saving your work as a RagTime 5.0.1 document.

4.3 Exercise 2: RagTime Does Your Calculations

Goals

In this exercise, you will learn some basic techniques for working with RagTime spreadsheets. The result of the exercise should look like this:

	A	B	C	D	E	F
1		Value 1	Value 2	Value 3	Value 4	Results
2	Addition	25	100	50	200	375
3	Subtraction	25	100	50	-200	75
4	Multiplication	25	100	5	2	25000
5	Division	25	100	0.5	2	0.25
6	Exponential	25	2			625
7	Column Totals	125	402	105.5	4	

You will learn about the characteristics and structure of a spreadsheet.

You will enter numbers and texts, construct simple formulas, and learn ways to design a spreadsheet to fit your needs.

The illustration above shows an example with which you can become familiar with spreadsheets step by step using basic calculation features. In the course of time, you will discover just how powerful this tool is. You will learn ways to simplify entering identical or similarly structured data in more than one cell.

The table consists of six columns with the titles “Value 1” to “Results.” It includes seven rows with the titles “Addition” to “Column Totals.”

The upper left and lower right cells remain empty.

The shaded area contains the values which are added for each column in the row “Column Totals” (25+25+25+25+25, and so on).

In the column “Results” you see the solutions for calculations performed with rows (adding the values 25 + 100 + 50 + 200, subtracting the values 25 - 100 - 50 - (-200), and so on).

Beginning a New Document

Choose START→PROGRAMS→RAGTIME→RAGTIME or start the program using your preferred method. If you left RagTime running since the last exercise, choose NEW BEGINNING WITH from the FILE menu and begin with a new LAYOUT. A window containing a layout opens, and the tool bar contains layout tools. Delete the active standard rectangle displayed when RagTime starts using the DELETE key. (It has a mechanism for creating new pages which would get in our way during this task.)

Make sure the correct PAGE SIZE, US LETTER, appears in the PAGE SETUP dialog box in the FILE menu.



A If you don't like the position of the tool bar at the top of the window, you can move it elsewhere. Grab the double bar to the left of the tool bar and drag it to the desired position. The tool bar becomes a palette which you can put anywhere. Also, you can change its size using Windows procedures.

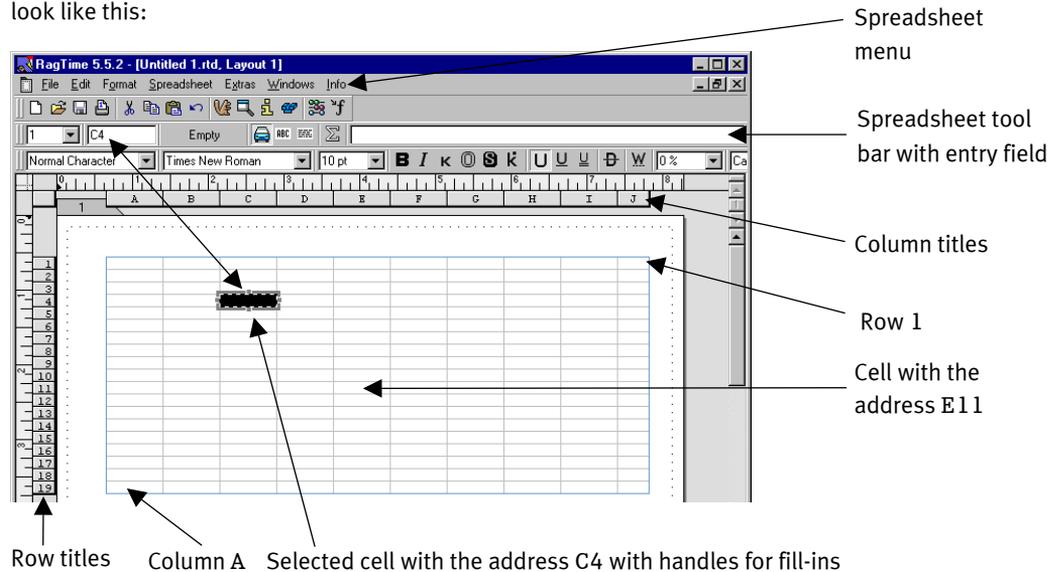
To “dock” the palette under the menu bar, drag it back onto the menu bar. You can dock it on any of the other borders of the RagTime window as well—left, right or at the bottom. Click on CLOSE to make the palette disappear.

A When RagTime recognizes a logical relationship between two contiguous selected spreadsheet cells, it completes the sequence by filling in the cells selected by dragging the handle. Let's try it out. Enter the values 2, 4 and 8 into three neighboring cells. Select the three cells and drag the last cell's handle over the cells you want RagTime to fill in for you. The cells are automatically filled with the values 16, 32, etc. Voilà! Choosing SPREADSHEET→FILL ROW... reveals additional ways to manipulate cell contents to fill in entire rows.

A RagTime displays a default standard rectangle that automatically appends new pages when text “spills over” the rectangle. However, you can switch this function off in the EXTRAS→SETTINGS→LAYOUT panel. Simply uncheck the box “Begin with a Rectangle with Text and Pipeline.”

Creating a Spreadsheet

1. Create a spreadsheet by drawing an object and choosing Drawing→CONTENT TYPE→SPREADSHEET from the menu bar.
2. Click in the spreadsheet. The layout window and the tool bar now look like this:



Spreadsheet Nomenclature

Before we begin, we should clarify some terms, which you can compare with the spreadsheet illustrated above:

- A table consists of vertical *columns* and horizontal *rows*.
- Columns are labeled with letters (A, B, C - Z, AA, AB, ...), and rows are labeled with numbers (1 - 16,000).
- The intersection of a row and a column is a *cell*.
- Each cell is accessible with a unique *address* (for example, C6).

A Friendly Reminder: Please Save Now

In the last exercise, you didn't save the result of your work until you were done. From now on, you should do things differently. Why? If you need to ask this question, everything has gone smoothly so far. No co-worker or family member wanted to change a fuse at an inopportune moment or caused a short. None of your children played with the cord. Nor did your PC experience one of its rare crashes.

But you know what we're talking about, right? Losing hours and hours of work on your computer. So, although it's still empty, please save the document with the FILE→SAVE AS... command under the name

The expressions spreadsheet and table are used synonymously here.

If you click in a cell of a spreadsheet, it becomes the *selected cell*. If you drag with the pointer across a number of cells, all of them are selected.

Selected cells are marked with *inverted* colors on the screen (white becomes black, and so on). Format commands, for example, FONT, always affect all selected cells. Similarly to selected objects, every selected cell has four handles. They can be used to copy identical contents to, or complete data sequences in, neighboring cells at the click of a mouse. We'll go into more detail about this later.

If you now begin to type, naturally the entry can only go into one cell. This cell is the *active cell*.

The *active cell* is marked on the screen with a moving broken line called the *ants*. All entries of cell contents are always put into the active cell.

4	Multiplication	25	100	0	2
5	Division	25	100	0.5	2
6	Exponential	25	2		

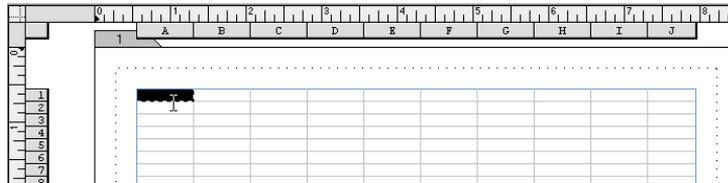
“Exercise 2” on your hard disk before continuing. Continue to save in regular intervals by choosing FILE → SAVE DOCUMENT from the menu bar, or using the CTRL+S keyboard shortcut.

Save regularly

One thing we don’t want is for you to have trouble working with RagTime.

Navigating in the Spreadsheet

- Click in cell A1. The cell is selected. Click in another cell. The selection of cell A1 is canceled, and the new cell is selected.



If you don’t want to take your hands from the keyboard in some situations, and if a cell is selected, you can select its neighboring cells with the arrow keys.

- With \leftarrow , you can select the cell immediately below. If you press the Shift key (\uparrow) simultaneously, the cell immediately above is selected.
- Press \rightarrow to select the cell to the right. If you press \uparrow , the direction is reversed here as well.

Entering Text in the Spreadsheet

- Click in cell B1 to enter the headings in the rows B through F.
- Type “Value 2”, and so on, to “Result.” Press \rightarrow after each entry to select the next cell.
- Click in cell A2 to enter the labels in rows 2 through 7. Press \leftarrow after each entry.
- Continue in the same way to enter the values.
- The results should look like this:

	A	B	C	D	E	F
1		Value 1	Value 2	Value 3	Value 4	Results
2	Addition	25	100	50	200	
3	Subtraction	25	100	50	-200	
4	Multiplication	25	100	5	2	
5	Division	25	100	0.5	2	
6	Exponential	25	2			
7	Column Totals					
8						
9						

When you study the table, three things stand out:

- In the first column (column A), the word “Multiplication” is cut off, and “Column Totals” protrudes into the next column (column B).

The effect of the keys for navigating in spreadsheets (arrows, tab and so on) depends on whether one or several cells (a range) are selected. If a range is selected, navigation using \rightarrow and \leftarrow is limited to the range. Using the arrow keys, however, takes you out of the range and cancels it.

While editing the contents of a cell, for example, by entering text, the arrow keys work only within the cell and can be used to move the insertion marker. The \rightarrow and \leftarrow keys and the mouse are available to select other cells and end the editing in the active cell.

To complete an entry without selecting another cell, press the RETURN key (\leftarrow). To end the editing of a cell without keeping the changes, use the Esc key.

68 VALUE TYPES IN CELLS

- All the texts begin on the left sides of the cells (left aligned).
- All the values, in contrast, are to the right in the cells (right aligned).

The explanation is that RagTime normally aligns text left in cells and values right. Of course you can change this, but it is the initial setting.

Value Types in Cells

Please refer to the illustration below. It contains the number 1,000 five times. For the reader, yes, but not for the computer!

1000	→ This 1000 is entered correctly.
1000	→ This 1000 was entered with the lower case letter "o."
1000	→ This 1000 was entered with the upper case letter "O."
1000	→ This 1000 was entered correctly, but contains a blank space at the end, a particularly nasty mistake!
1000	→ This 1000 was also correctly entered but contains a blank space at the beginning, which is noticeable. This error occurs especially with novices from time to time.

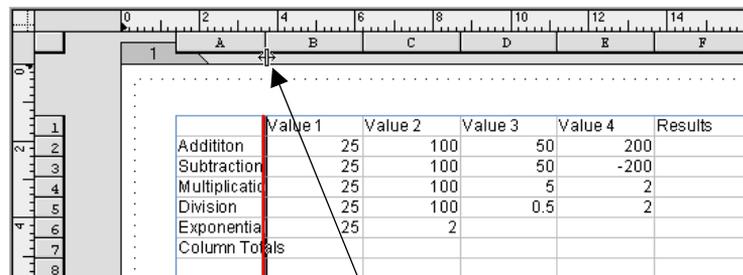
To discover such errors, you can select the suspected cell and check in the tool bar which value type the cell contains. The possibilities include, among others, text, number, date, and time span.

Changing the Column Width and Cell Height

11. Select a cell in column A. Position the pointer exactly on the separator line in the column title bar between columns A and B. The pointer changes its appearance. Press the mouse button and hold it down.



12. Notice that the pointer has changed and the line between columns A and B is highlighted (ghost line).



Pointer on separator line
"Ghost" line

B / A You can easily copy identical values from two or more cells to several cells right in the spreadsheet by using the fill-in function.

Here's an example:

1. Create a new spreadsheet. Enter the value 25 in cell A1. Conclude the entry with \times .
2. The cell is now selected and has a “handle” on each side. Drag the bottom handle over the four cells below.
3. RagTime copies the content of the originally selected cell into the four lower cells.

You can use this feature to copy any kind of cell content, including formulas. We will familiarize you with additional and more complex operations that enable you to work even faster using RagTime's fill-in features later on.

RagTime analyzes your entries in cells and assigns each a value type according to the following rules:

→ *Numbers* consist of digits (0-9), the positive and negative signs (+,-), decimal points (.), thousands separators (,) and exponential notation symbols (e or E).

→ *Dates* (calendar dates and points in time) consist of numbers and additional characters defined by the system software of your computer. Please refer to the DATE/TIME control field under START→SETTINGS→CONTROL PANEL. When you enter dates without a century indicator, RagTime prefixes them with 20 for entries from 1 to 25 and with 19 for entries higher than 25.

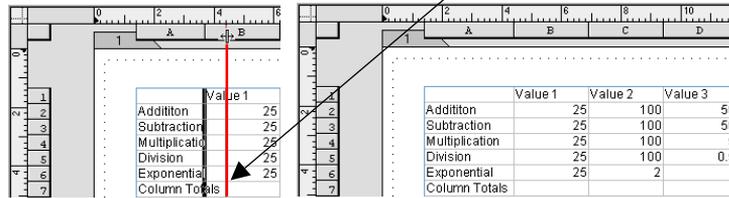
→ *Currency symbols* with existing value formats.

→ *Time spans* consist of numbers and the abbreviations *d* for days, *h* for hours, *m* for minutes and *s* for seconds. At least two of the abbreviations must appear in the entry. For example, if you want to enter two hours, type “2h 0m” or “0d 2h”.

→ *Text* is any entry for which none of the above rules do not apply.

A blank space at the end of a text is often hard to recognize. If you suspect that such a character has caused a value to be misinterpreted, you can make it, and other such characters, visible on the screen by choosing WINDOWS→SHOW→SPECIAL CHARACTERS. You can see them in the entry field in the tool bar.

13. Move the mouse to the right so that the ghost line is directly behind the word "Totals."



14. Release the mouse button. The column width changes as desired.
15. You can change row heights analogously.

Calculating the Sums of the Columns

Next you should find the sums of columns B through E. To do so, you will enter formulas in B7, C7, D7, and E7 successively. The formulas which we treat here all calculate the sum of their respective columns; however, some differ significantly in appearance and the manner in which they are entered.

This way you will learn various methods of entering formulas, all of which you will later use more or less frequently.

Calculating the Sum of the First Column

16. Select cell B7.
17. Type an equals sign (=) or click the abacus in the tool bar.



The FORMULA palette appears. Move it so that the spreadsheet is not covered.

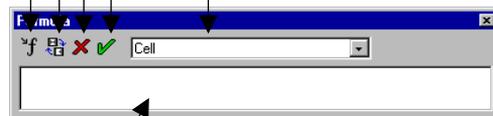
Open function list

Switch between absolute and relative addresses

Cancel formula entry

Confirm formula entry

Formula target (the cell or text in the cell)



Formula entry field

A If you select several columns, or cells in several columns, and then drag one of the separator lines between the column headers, you can change the width of all columns simultaneously.

.....> Example 1: Select the first 5 columns of a spreadsheet and click on the separator between columns 3 and 4. Holding down the mouse button, slowly move the separator to the left, and then to the right. The selected columns to the left of the dragged separator become narrower or wider, proportional to their original widths, while those to the right analogously become wider or narrower, maintaining the initial total width.

.....> Example 2: Once again, select the first 5 columns of a spreadsheet and click on the separator between columns 5 and 6. If you drag the separator line at the far right of the selection, all the selected columns will become proportionally wider or narrower, and the total width changes.

.....> Example 3: Make column A substantially wider, about twice as wide as column B. Once again, select the first 5 columns of the spreadsheet and select the separator between columns 5 and 6. If you hold down the SHIFT key (⇧) while dragging, the same change is applied to all selected columns; the original width is ignored and the total width changes. Try it out!

18. Click in the formula entry field of the FORMULA palette. (Click in the field before entering each formula to initiate the entry. The buttons are also available then.)

Formulas are created by joining cell addresses and constants with operators, for example, plus (+) and minus (-).

19. Type the following formula in the entry field: “b2+b3+b4+b5+b6”. (Lower case letters are permitted.) If you make a typing error, you can correct it much as you do in word processing.

20. When you have completed the entry, press ENTER or confirm the entry by clicking the ✓ in the FORMULA palette (in short, check it off). If the entire formula is wrong, cancel the formula instead of confirming it.

21. The first formula is finished. The result appears in cell B7.

Typing the formula was admittedly tiresome, but now things will get easier.

Calculating the Sum of the Second Column

22. Select cell C7 for entering the next formula.

23. Is the Formula palette still visible? If not, click the ABACUS. Then initiate the formula entry by clicking in the entry field in the palette. The mouse pointer becomes a spreadsheet pointer with function symbols attached to it. This indicates that the desired formula will be applied to the selected cells.

24. Click in cell C2 and then in cells C3, C4, C5, and C6 successively.

25. If you check the Formula palette now, or if you watched while clicking the cells, you will notice that RagTime entered both the cell address and the plus sign. This works only with addition.

26. You need only to check off the formula, and the result will appear in cell C7.

Inserting cell addresses by clicking is a technique which you should use in the future. It is not only more convenient than typing, but significantly less error prone. Nevertheless, you sometimes need to type addresses when editing formulas.

Calculating the Sum of the Third Column

27. Select D7 for entering the formula for the sum of column D (Value 4).

28. Since sums are probably the most frequent calculations in spreadsheets, RagTime provides you with a special function, Sum (*List*), for this. *List* represents the numbers which are to be added.

29. Is the Formula palette still visible? If not, click the ABACUS again.

30. Click in the entry field of the Formula palette and enter the following function:

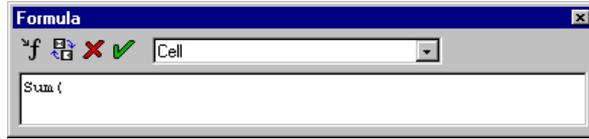
B If the formula entry field is too small for you, use the standard Windows procedure to enlarge it by grabbing the enlargement point with the mouse pointer on the bottom right corner and dragging it open.

RagTime ignores upper- and lowercase orthography when you *enter* cell addresses or functions. When displayed, your entry is *changed*.

This does not apply to *text* used in formulas. Text is entered between single quotation marks ('text') and is not changed by RagTime.

→ A *range* is a group of adjacent cells which are selected or used in formulas together, for example, the cells from A1 to F2 (A1:F2 in formula notation), or the entire column B (B:B in formula notation).

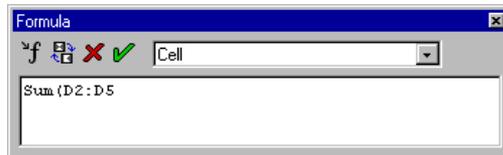
→ A *list* consists of two or more individual values or cells which need not, but may be, adjacent to each other. Ranges may be used as elements in lists. The following formula is therefore valid: Sum (A1:A5;B3:B5;C3)



31. Click cell D2 and hold down the mouse button.
32. Move the pointer downwards, dragging it over cells D2 through D5. RagTime marks the range (D2:D5 in formula notation) with a border.

	Value 1	Value 2	Value 3	Value 4	Results
Addition	25	100	50	200	
Subtraction	25	100	50	-200	
Multiplication	25	100	5	2	
Division	25	100	0.5	2	
Exponential	25	2			
Column Totals	125	402			

The range is entered in the formula, which now looks like this:



33. Complete the Sum function with a closing parenthesis.



34. Finally, press ENTER again (or click +). The result appears in cell D7.

Calculating the Sum of the Last Column

35. You know the ritual by now. Select cell E7.
36. Since not only sums, but virtually every mathematical calculation imaginable must be calculated in spreadsheets, RagTime masters an abundance of functions from various disciplines.

Fortunately, you don't need to remember all these functions, but can get them from a list and have RagTime insert them in your formulas.

Click the FUNCTIONS button in the tool bar or FORMULA palette.



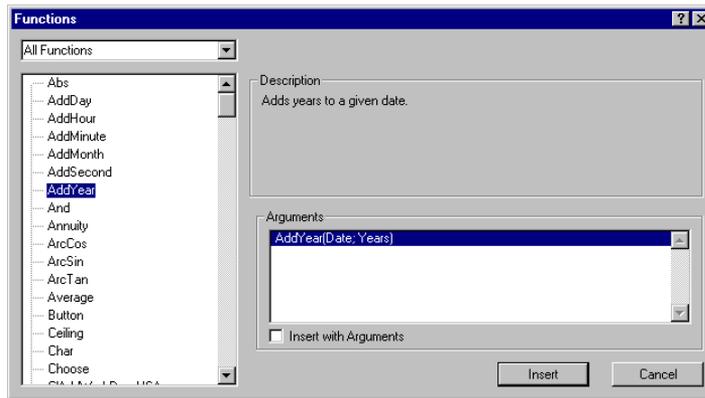
37. The Functions dialog box displays an alphabetical list of functions



B Another way of rapidly building the sum of a column or row of values is by using the **ENTER SUM FORMULA** tool. Click in the cell below or beside the number sequence to be totaled and then click on the **ENTER SUM FORMULA** icon in the tool bar. RagTime enters the sum of the number sequence in the cell you selected.

This method should be used only if the relation to the cells that are to be summed up is unequivocal. However, if the result is not what you expected, you can always check which cells are included in the sum in the **FORMULA** palette

which RagTime offers. Under DESCRIPTION, you will find information about the purpose of the function and its arguments. All functions in RagTime have the same structure:



Function Name (ARGUMENTS). Arguments are values which the function requires for execution.

The function Sum, which you have already seen, is likewise built according to this structure:

→ Sum(*List*)

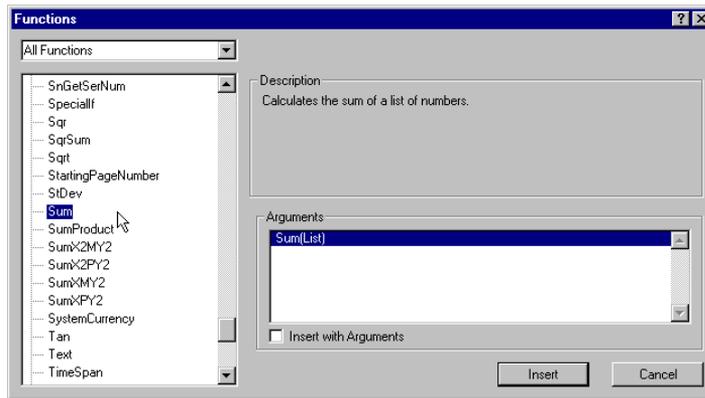
→ Function Name: Sum

→ Arguments: (list of values) enclosed in parentheses.

Additional arguments, if present, are separated with semicolons, as in the illustration.

38. Click the “down” scroll arrow until the function Sum appears.

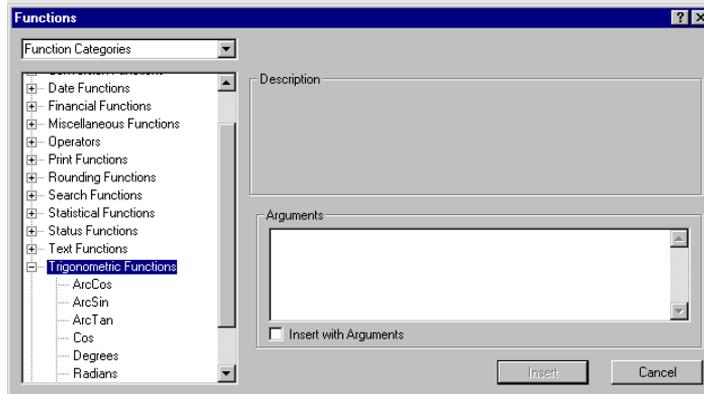
39. Select the function Sum by clicking the name in the list.



Functions may be displayed not only alphabetically, but also according to other criteria which you can choose in a pop-up menu.

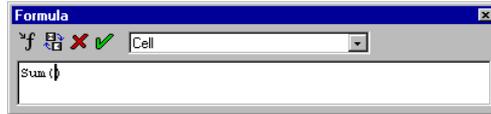
You can open or close an individual category by clicking the plus or minus sign preceding its title.

If this doesn't display the functions' names completely, zoom the window.

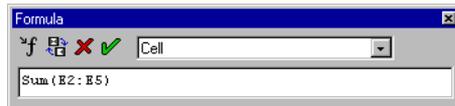


If you know the name of the function that you want to see in the list, you don't have to use the scroll bar. Just type the first few letters of the name, and the list scrolls to the correct position.

40. Click INSERT.
41. The FORMULA palette appears with the function Sum. The blinking insertion marker between the parentheses indicates that you can enter the arguments.



42. Click cell E2 and hold down the mouse button.
43. Move the pointer downwards, dragging over cells E2 through E5. RagTime marks the range (E2 : E5 in formula notation) with a border.



44. Press ENTER or check off the formula.
45. The result of the calculation appears in cell E7.

Calculating the Sums of the Rows

Now that you have worked intensively with the function Sum, it won't be any problem to add the numbers in row 2.

When you are finished with that, we can continue with the other lines. Let's begin with row 3.

46. To perform subtraction, you have to use the method "click a cell, type the operator (minus sign), click the next cell, and so on."
47. You will get the desired result in rows 4 and 5 with the same procedure.

The operator for multiplication differs from that which you use on paper.

Multiplication: not a dot or an "x" but an asterisk (*)

For division: always use the slash (/).

Lastly, the exponential calculation in row 6 must be explained. Instead of the common notation for base and exponent, 25^2 , you must enter the following notation in the formula in cell F6: B6**C6 or B6^C6.

B / A Please note that, to type the operator \wedge , you must press the \wedge key (usually located at top left on your keyboard) followed by a space. The reason for this is that this symbol is normally used to create special characters in the French character set where it's applied on top of the letter typed after it (it wasn't originally intended to be used alone).

Formatting the Table

To complete exercise 2, you still need to give the table a more appealing appearance. This process, called “formatting,” covers an abundance of features, the most important of which you will find under **FORMAT** in the menu bar.

To what degree you employ these features is a matter of personal taste and depends on how polished your results should be, for there is always something to improve or polish. Three examples appear below; you will find more in later exercises.

First, align the headings in row 1 to the right, so the texts and numbers are balanced. Then set the typeface of the headings and results to bold. Finally, some of the cells should be shaded with gray fill.

48. Click cell **B1** (Value 1) and drag the pointer horizontally to cell **F1**.

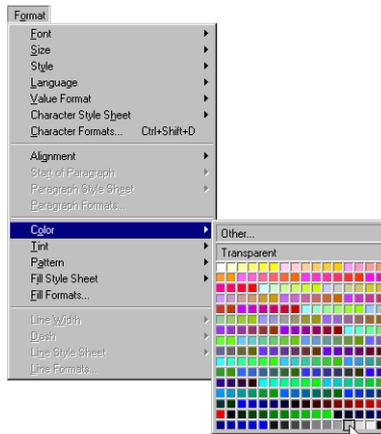
The five cells containing the headings are now selected.

49. Choose **FORMAT** → **ALIGNMENT** → **RIGHT ALIGNED** from the menu bar.

The cell contents, the headings, move to the right.

50. To set the headings and results in bold typeface, select the appropriate cells and choose **FORMAT** → **STYLE** → **BOLD** from the menu bar.

51. Finally, to make the table look like the example at the beginning of the exercise, shade the values in the table in cells **B2** through **E6**. Select the range **B2 : E6** and choose the command **FORMAT** → **COLOR** → **(GRAY)** from the menu bar.

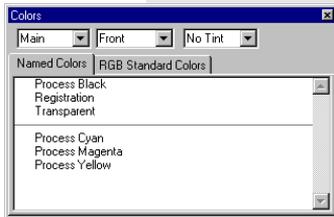


Many of RagTime's submenus may be torn off and placed on the screen as palettes. This is particularly useful when you want to use certain commands repeatedly or to check the settings, such as font, of various selections without having to open a menu and look for a check-mark each time. To tear off a menu, just drag out of the menu until a ghost rectangle representing the palette appears.



Here's what a torn-off color menu palette looks like. The palette lets you switch back and forth between NAMED COLORS and RGB STANDARD COLORS by clicking on the tab of the corresponding panel. Among others, NAMED COLORS include the primary colors cyan, magenta, yellow and black (CMYK) that constitute the standard in the printing industry as well as additional colors you may have previously defined under WINDOWS→AUXILIARIES→COLORS. To assign a NAMED COLOR to a selected object, simply select an entry from this menu.

RGB STANDARD COLORS is a palette of commonly used colors that usually suits most purposes. Colors are selected by clicking a color on the palette, which is then highlighted by a black frame. At the same time, the color is displayed in the box in the top left-hand corner. Double-clicking this box displays the operating system's Color Picker, which you can use to mix additional colors. To assign a color to an object, simply drag and drop the desired color from the color palette onto the object.



Regardless of whether NAMED COLORS or RGB STANDARD COLORS are being displayed, you can use any of the three additional menus to give the selected object additional properties.

Left menu: This lets you determine which color is displayed and set, e.g. a drawing's fill or border line.

Middle menu: Lets you define foreground and background colors or patterns for two-color objects.

Right menu: Allows you to set a color's tint. Once you have decided on a color, you can use this menu to lessen the color's percentual degree of intensity.

4.4 Exercise 3: Success in the Sales Department

Exercise 3 is a practical example in which you will learn further spreadsheet techniques.

Goals You will:

- learn more functions,
- save time by copying formulas,
- further your knowledge of formatting,
- insert and delete rows of a spreadsheet,
- change numerical data and discover the effects,
- present the numerical data more effectively in a graph.

The results should look like the following example. It contains the monthly sales figures of three employees and a brief analysis.

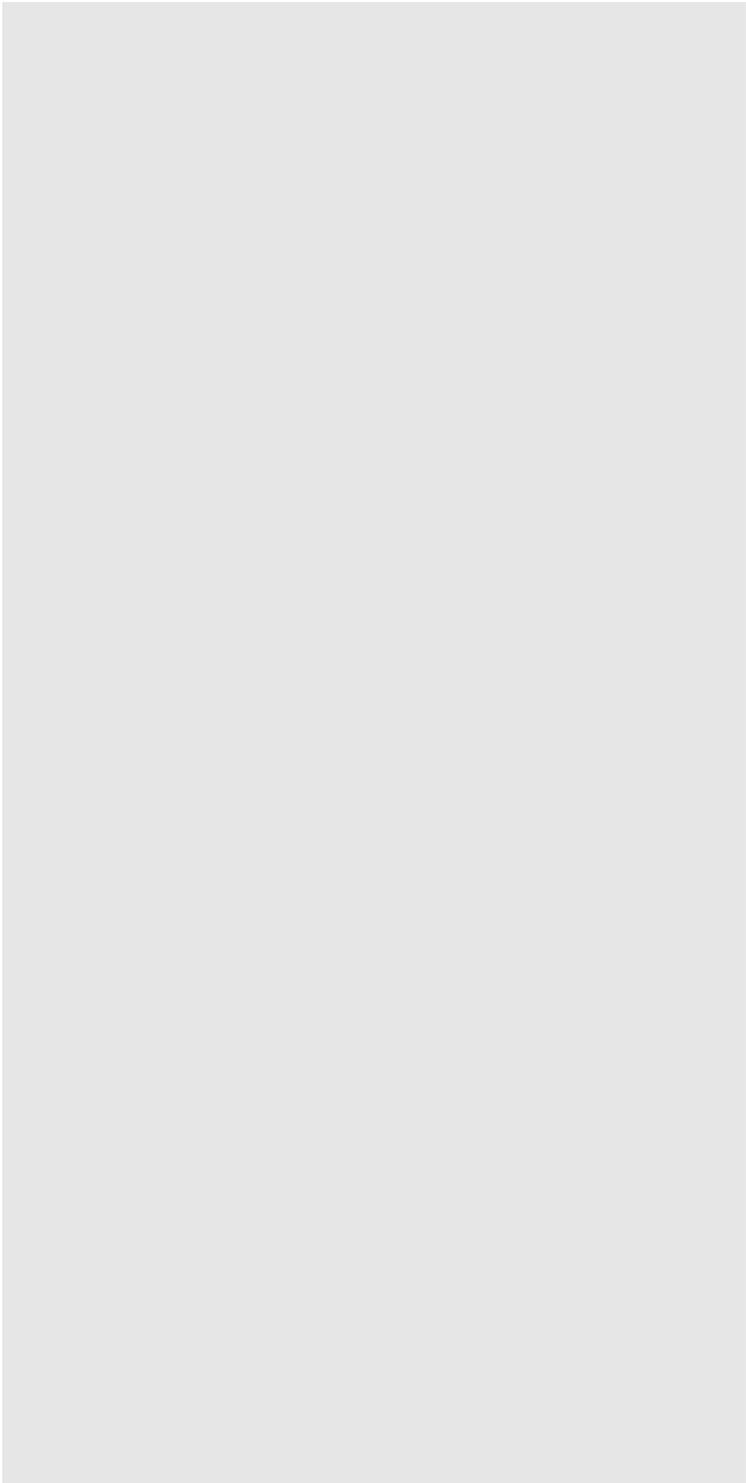
Summary of Individual Sales Volume for 2001			
Representative	Gainsborough	Williams	Hanson
Month	\$	\$	\$
January	\$23,000.00	\$20,700.00	\$28,750.00
February	\$15,000.00	\$13,500.00	\$18,750.00
March	\$14,000.00	\$12,500.00	\$17,500.00
April	\$20,000.00	\$18,000.00	\$25,000.00
May	\$16,000.00	\$14,400.00	\$20,000.00
June	\$25,000.00	\$22,500.00	\$25,600.00
July	\$12,500.00	\$11,250.00	\$15,370.00
August	\$22,000.00	\$20,520.00	\$28,125.00
September	\$18,300.00	\$16,470.00	\$22,875.00
October	\$19,700.00	\$17,730.00	\$24,625.00
November	\$17,100.00	\$15,390.00	\$21,375.00
December	\$45,400.00	\$40,860.00	\$15,000.00
Total	\$248,000.00	\$223,820.00	\$262,970.00
Minimum Volume	\$12,500.00	\$11,250.00	\$15,000.00
Maximum Volume	\$45,400.00	\$40,860.00	\$28,750.00
Average Volume	\$20,666.67	\$18,651.67	\$21,914.17

Beginning a New Document

Choose START → PROGRAMS → RAGTIME → RAGTIME or your favorite method to start the program. If you left RagTime running since the last exercise, choose the command NEW BEGINNING WITH... from the FILE menu and begin with a LAYOUT. A window containing a LAYOUT appears and the tool bar displays layout tools. Delete the default active standard rectangle using the DELETE (BACKSPACE) key. (It has a mechanism for creating new pages which would get in our way during this task.)

Creating a Spreadsheet

1. Draw a rectangle approximately the size of the one in the example and give it the contents type SPREADSHEET.
2. Click in the spreadsheet. The spreadsheet tools appear in the tool bar, and the row and column titles appear along the rulers.



Entering the Values

3. Click in cell A1.
4. Enter into the table the values which appear in the illustration below. Names of months in column A can be entered using the fill function as shown below.

Representative	Gainsborough	Williams	Hanson
Month	\$	\$	\$
January	23000	20700	28750
February	15000	13500	18750
March	14000	12500	17500
April	20000	18000	25000
May	16000	14400	20000
June	25000	22500	26500
July	12500	11250	15370
August	22000	20520	28125
September	18300	16470	22875
October	19700	17730	24625
November	17100	15390	21375
December	45400	40860	15000
Total			
Minimum Volume			
Maximum Volume			
Average Volume			

5. Enter "January" and "February" in cells A5 and A6, respectively. Select the two cells and drag the lower handle to cell A16. RagTime understands that it is dealing with month-by-month date-related information and completes the sequence by filling in the selected cells with the remaining months. You may need to widen the cells to accommodate words that run over the borders.
6. Save the document now under the name "Exercise 3" on your hard disk.

← Please save regularly

Representative	Gainsborough	Williams	Hanson
Month	\$	\$	\$
January	23000	20700	28750
February	15000	13500	18750
March			
April			
May			
June			
July			
August			
September			
October			
November	17100	15390	21375
December	45400	40860	15000
Total	248000		
Minimum Volume			
Maximum Volume			
Average Volume			

If a spreadsheet cell contains text which is too long to be displayed in the cell, the display (but not the actual text) is clipped at the cell border. However, if the neighboring cell is empty, its space is also used to display the clipped text. This also applies to cells with rotated contents.

It would be dangerous to clip the display of numbers; for example, millions might appear to be thousands. Therefore, if an entire number cannot be displayed, RagTime first tries to display it in exponential form and, if this is not possible, fills the cell with “#” characters.

None of this has an effect on the contents of the cell; only the display is affected. Cell references in formulas return the correct contents.

Entering the “Sum” Formula

7. Click in cell B17.
8. Enter the “Sum” formula. Select Sum from the function list and drag over cells B5 : B16.
9. Press ENTER or click ✓. The result appears in cell B17.

Summary of Individual Sales Volume for 2001				
Representative	Gainsborough	Williams	Hanson	
Month	\$	\$	\$	
January	23000	20700	28750	
February	15000	12000	18750	
March				
April				
May				
June				
July				
August				
September				
October	19000	17000	24000	
November	17100	15300	21375	
December	45400	40860	15000	
Total	248000			
Minimum Volume	12500			
Maximum Volume	45400			
Average Volume	20666.666666667			

Entering the Functions Min, Max, and Average

10. Click in cell B18 to enter the formula for minimum sales.
11. Select **Min** from the function list and drag over cells B5 : B16 as before

The functions **Sum** and **Min** both use the argument **LIST**. As you can gather from the description in the Functions dialog box, the function **Min (List)** finds the smallest value in a list and returns it in the cell in which the formula is entered, in this case, B18.

12. Proceed in the same manner to determine the maximum and average values of cells B5 : B16. The function for the maximum values is **Max** and for the average of all values, **Average**.

Be careful when dragging over cells that you do not inadvertently include too many cells, which will give you wrong results.

To avoid this error, it may be helpful to drag from bottom to top, that is, from B16 to B5. For RagTime, the direction makes no difference. The table should now look something like this:

B / A When dragging over cells, be careful not to include too many cells by mistake. This would generate unwanted results.

To keep this from happening, it may help to select the cells from bottom to top, i.e., from B16 to B5. RagTime doesn't care how you make the selection.

Copying Formulas

13. You could repeat this procedure for the other columns. It is faster, though, to copy the formulas into the cells to the right. To do this, select the four cells containing the formulas (B17:B20).

	45400
	248000
me	12500
ime	45400
ne	20666.666666667

14. Choose EDITION→COPY from the menu bar.

15. Select cells C17:D20.

16. Choose EDITION→PASTE from the menu bar.

	45400	40860	15000
	248000	223820	263870
e	12500	11250	15000
ie	45400	40860	28750
:	20666.666666667	18651.666666667	21989.166666667

The results appear in columns C and D.

16	December	45400	40860	15000
17	Total	248000	223820	263870
18	Minimum Volume	12500	11250	15000
19	Maximum Volume	45400	40860	28750
20	Average Volume	20666.666666667	18651.666666667	21989.166666667
21				

RagTime did not, as you may have expected, transfer the *values* from column B, but adapted the *formulas* to the new location. See for yourself. Click in cell D20. Open the FORMULA palette by clicking the ABACUS and check the formula.

The formula for the average in cell D20 refers correctly to the cells above it, D5:D16.

	0	1	2	3	4	5	6
		A	B	C	D	E	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							

Summary of Individual Sales Volume for 2001				
Representative	Gainsborough	Williams	Hanson	
Month	\$	\$	\$	
January	23000	20700	28750	
February	18750	17750	25000	
March	17500	20000	26500	
April	25000	15370	28125	
May	20000	22875	24625	
June	26500	21375	21375	
July	15370	21375	21375	
August	28125	21375	21375	
September	22875	21375	21375	
October	19700	17730	24625	
November	17100	15390	21375	
December	45400	40860	15000	
Total	248000	223820	263870	
Minimum Volume	12500	11250	15000	
Maximum Volume	45400	40860	28750	
Average Volume	20666.666666667	18651.666666667	21989.166666667	

Formula	
	Formula Entry Cell
Average (D5:D16)	

Formatting the Table

Next, the appearance of the table ought to be polished. First, all numbers should have thousands separators and two decimal places. The titles and the calculated cells should have bold typeface.

Lines should set off the sales numbers from the titles above and the results below.

B / A Formulas can also be copied using the fill-in feature. You may need to delete the results in columns C and D to do so.

1. Select the four results from B17 to B20.

	248000
Volume	12500
Volume	45400
Volume	20666.66666667

2. Move your pointer to the selection's right handle until it changes to a new spreadsheet pointer with a plus sign.

	248000		
Volume	12500		
Volume	45400		
Volume	20666.66666667		

3. Keep your finger on the mouse button and drag the handle two columns to the right.

The results appear in columns C and D. What happened is that RagTime copied the selected formulas, pasted them into columns C and D, and calculated the results.

	248000	223820	263870
Volume	12500	11250	15000
Volume	45400	40860	28750
Volume	20666.66666667	18651.66666667	21989.16666667

Instead of clicking the ABACUS, you can open the FORMULA palette by choosing **WINDOWS** → **PALETTES** → **FORMULA** from the menu bar. There you will find more palettes; it's worthwhile to experiment with them!

Determining the Value Format

17. To select the numbers in cells B5:D20, click in cell B5, hold down the mouse button and drag diagonally to cell D20.

Summary of Individual Sales Volume for 2001			
Representative	Gainsborough	Williams	Hanson
Month	\$	\$	\$
January	23000	20700	28750
February	15000	13500	18750
March	14000	12500	17500
April	20000	18000	25000
May	16000	14400	20000
June	25000	22500	26500
July	12500	11250	15370
August	22000	20520	28125
September	18300	16470	22875
October	19700	17730	24625
November	17100	15390	21375
December	45400	40860	15000
Total	248000	223820	263870
Minimum Volume	12500	11250	15000
Maximum Volume	45400	40860	28750
Average Volume	20666.666666667	18651.666666667	21989.166666667

18. Choose **FORMAT** → **VALUE FORMAT** → 1,234.50 from the menu bar. This is the result:

Summary of Individual Sales Volume for 2001			
Representative	Gainsborough	Williams	Hanson
Month	\$	\$	\$
January	\$23,000.00	\$20,700.00	\$28,750.00
February	\$15,000.00	\$13,500.00	\$18,750.00
March	\$14,000.00	\$12,500.00	\$17,500.00
April	\$20,000.00	\$18,000.00	\$25,000.00
May	\$16,000.00	\$14,400.00	\$20,000.00
June	\$25,000.00	\$22,500.00	\$26,500.00
July	\$12,500.00	\$11,250.00	\$15,370.00
August	\$22,000.00	\$20,520.00	\$28,125.00
September	\$18,300.00	\$16,470.00	\$22,875.00
October	\$19,700.00	\$17,730.00	\$24,625.00
November	\$17,100.00	\$15,390.00	\$21,375.00
December	\$45,400.00	\$40,860.00	\$15,000.00
Total	\$248,000.00	\$223,820.00	\$263,870.00
Minimum Volume	\$12,500.00	\$11,250.00	\$15,000.00
Maximum Volume	\$45,400.00	\$40,860.00	\$28,750.00
Average Volume	\$20,666.67	\$18,651.67	\$21,989.17

Formatting Headings

19. Select cells A1:D4. Choose **FORMAT** → **STYLE** → **BOLD** from the menu bar and repeat the procedure for cells A17:D20.

20. Select cells A3:D3. Choose **FORMAT** → **ALIGNMENT** → **RIGHT ALIGNED**, and repeat the procedure for cells B4:D4. The result looks like this:

A You can edit or create new value formats by choosing **WINDOWS** → **AUXILIARIES** → **VALUE FORMAT EDITOR**. By the way, formats follow a pre-defined sequence in their relation to one another. It's important to know it when you want to create your own formats: fill formats → line formats → character formats → character style sheet formats. For example, character style sheets can use the aforementioned formats, but a fill format cannot use a character format.

A RagTime automatically recognizes a number of value formats. If you only have a few numbers to type, it thus makes sense to enter the unit along with the number. Let's see how this works in practice:

1. Create a new spreadsheet and enter the following values one underneath the other: "\$_23.4", "\$_234.10", "EUR_87.9", "234.10_€" and "£100" (please note that in the last example, you may not enter a space between the number and the pound sign, whereas you must leave a space between all other currency indicators and their numbers).
2. RagTime converts all the preceding entries into number entries, combined with their respective currency symbols. This means the cells' text entries have been replaced by numeric values, combined with currency formats. However, the layout shows the entry along with currency designations and the properties applicable to the different currency formats (decimal and thousand separators, etc.).

Representative	Gainsborough	Williams	Hanson
Month	\$	\$	\$
January	\$23,000.00	\$20,700.00	\$28,750.00
February	\$15,000.00	\$13,500.00	\$18,750.00
March	\$14,000.00	\$12,500.00	\$17,500.00
April	\$20,000.00	\$18,000.00	\$25,000.00
May	\$16,000.00	\$14,400.00	\$20,000.00
June	\$25,000.00	\$22,500.00	\$26,500.00
July	\$12,500.00	\$11,250.00	\$15,370.00
August	\$22,000.00	\$20,520.00	\$26,125.00
September	\$18,300.00	\$16,470.00	\$22,875.00
October	\$19,700.00	\$17,730.00	\$24,625.00
November	\$17,100.00	\$15,390.00	\$21,375.00
December	\$45,400.00	\$40,860.00	\$15,000.00
Total	\$248,000.00	\$223,820.00	\$263,870.00
Minimum Volume	\$12,500.00	\$11,250.00	\$15,000.00
Maximum Volume	\$45,400.00	\$40,860.00	\$28,750.00
Average Volume	\$20,666.67	\$18,651.67	\$21,989.17

Does row 17 look like this?

December	\$45,400.00	\$40,860.00	\$15,000.00
Total	#####	#####	#####
Minimum Volume	\$12,500.00	\$11,250.00	\$15,000.00
Maximum Volume	\$45,400.00	\$40,860.00	\$28,750.00
Average Volume	\$20,666.67	\$18,651.67	\$21,989.17

If so, columns C and D are merely too small, which is indicated by the symbols “###.” Widening the three columns will solve the problem.

Inserting Rows

As you saw in the illustration of the table at the beginning of this exercise, the first four rows are separated from the sales figures by a gray row. The same applies to the last four rows. To achieve this effect, you must first insert an empty row.

- Click the title of row 5. The entire row is selected.

Month	\$	\$	\$
January	\$23,000.00	\$20,700.00	\$28,750.00
February	\$15,000.00	\$13,500.00	\$18,750.00

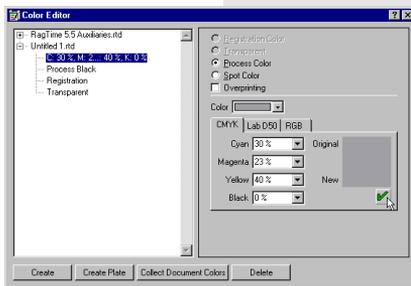
Choose SPREADSHEET → INSERT ROWS from the menu bar and click INSERT. A row is inserted above row 5, becoming the new row 5. The rest of the table is moved down, and the formulas are automatically adapted to the new situation.

Month	\$	\$	\$
January	\$23,000.00	\$20,700.00	\$28,750.00

Insert a blank line in the lower part of the table by selecting row 18, which contains the sums, and choosing TABLE → INSERT ROWS.

A As always, it's best to format colors using style sheets. If, for example, you would like to change a shade of gray, making this change just once in the style sheet causes all occurrences within the style sheet to take on the change. Before creating a color style sheet, it makes sense to choose an appropriate color space. In RagTime, color style sheets are defined under **WINDOWS** → **AUXILIARIES** → **COLORS**. The following window opens up when you make this choice.

New color style sheets are generated using the **CREATE** button in the **COLOR** menu and assigning the finished color, or by entering values for the color components. Furthermore, the properties **PROCESS COLOR/SPOT COLOR/OVERPRINTING/NOT OVERPRINTING** and, of course, the **COLOR MODEL** itself are also set in this manner. Please note that the split color preview area will continue to display two color values until you click the green checkmark. This click validates the final values for the color style sheet.



To create a color style sheet for the adjoining example, click on **CREATE** and select an appropriate shade of gray from the **COLOR** menu. Choosing **OTHER...** opens the operating system's Color Picker that allows you to do some additional fine-tuning. Click the green checkmark as soon as you have set the color and other properties. The left side of the color editor now displays your color style sheet with a name that reflects the color model's breakdown by color. You may replace this technical name with one of your choice by editing it as you would an entry in a list view.

To assign a color style sheet to an object, simply drag and drop the color style sheet onto the selected object, or pick the corresponding item from the **FORMAT** menu.

Since different color models have color spaces of varying sizes, a color may change its appearance on screen and on paper as it flows from one color space into the next. The reason colors sometimes take on a slightly different appearance in RagTime lies in their color space's properties. This isn't a RagTime quirk.



B / A If you work a lot with spreadsheets, you can access related commands such as **INSERT ROWS**, **SORT**, etc. from the **SPREADSHEET COMMANDS** palette as well.

Coloring Cells

- 22. Select cells A5 : D5.
- 23. Choose **FORMAT** → **COLOR** → (GRAY), for example. Continue in the same manner with cells A18 : D18.

Reducing Row Height

- 24. To change the row height, position the pointer on the separator line between row headers 5 and 6. Notice that the pointer changes its form.
- 25. Press and hold the mouse button.
- 26. Move the pointer slowly upwards. A ghost line helps you set the height of the row as you wish.

Month	Gainsborough	Williams	Hanson
January	\$23,000.00	\$20,700.00	\$28,750.00
February	\$15,000.00	\$13,500.00	\$18,750.00

- 27. Release the mouse button. RagTime adjusts the height of the row. Continue in the same manner with row 18.

The table is now finished and may be printed—

Wrong Number— Now What?

You receive a phone call. The message is that unfortunately two digits were reversed when the numbers for the sales representative Hanson were entered. In the month of June, the figure was not 26,500 but 25,600. A rare case? Not at all! But here the spreadsheet shows its strength, namely, the possibility of making later changes to correct errors like this one.

- 28. Click in cell D11 and overwrite the wrong number with 25600. Before you press ENTER, check the four results at the bottom of the table.

Representative	Gainsborough	Williams	Hanson
Month	\$	\$	\$
January	\$23,000.00	\$20,700.00	\$28,750.00
February	\$15,000.00	\$13,500.00	\$18,750.00
March	\$14,000.00	\$12,500.00	\$17,500.00
April	\$20,000.00	\$18,000.00	\$25,000.00
May	\$18,000.00	\$14,400.00	\$20,000.00
June	\$25,000.00	\$22,500.00	\$25,600.00
July	\$12,500.00	\$11,250.00	\$15,370.00
August	\$22,000.00	\$20,520.00	\$28,125.00
September	\$18,300.00	\$16,470.00	\$22,875.00
October	\$19,700.00	\$17,730.00	\$24,625.00
November	\$17,100.00	\$15,390.00	\$21,375.00
December	\$45,400.00	\$40,860.00	\$15,000.00
Total	\$248,000.00	\$223,820.00	\$262,970.00
Minimum Volume	\$12,500.00	\$11,250.00	\$15,000.00

Now press ENTER. In a flash, RagTime brings all the values up to date.

Reversed characters are among the most common typing errors. Therefore, RagTime offers a special command to correct them without changing the position of the insertion marker:

If the insertion marker is at the end of a word, you can reverse the order of the last two characters by choosing EDIT→SWAP TWO CHARACTERS.

If the insertion marker is between two letters in a word, these will be swapped.

The Table Gets a Graph

Often numbers alone are difficult to interpret. Charts, or graphs, can help emphasize differences and demonstrate trends in numerical data. With its many graph variations, RagTime presents such an abundance of formatting possibilities that you have an appropriate type of diagram for every purpose.

The steps for creating a graph

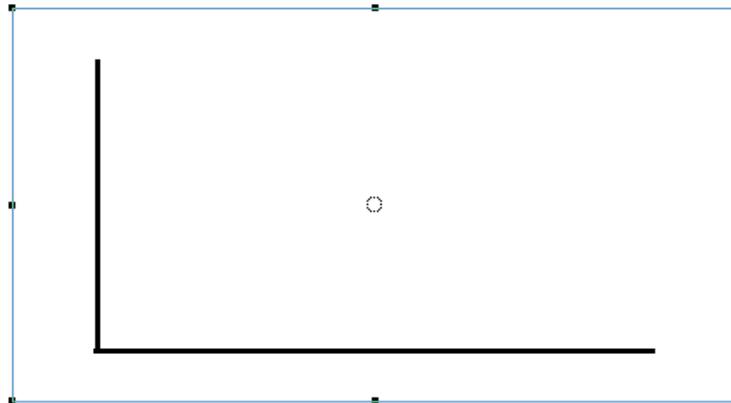
- Select and copy values in a spreadsheet.
- Draw a rectangle and give it the contents type graph.
- Insert the data in the graph.
- Pick a graph type from the gallery.
- Format the graph.

You will now apply these steps to the example “Sales Figures.”

29. Select cells A22 : D22 (Average Volume).

20	Minimum Volume	\$12,500.00	\$11,250.00	\$15,000.00
21	Maximum Volume	\$45,400.00	\$40,860.00	\$28,750.00
22	Average Volume	\$20,666.67	\$18,651.67	\$21,914.17
23				

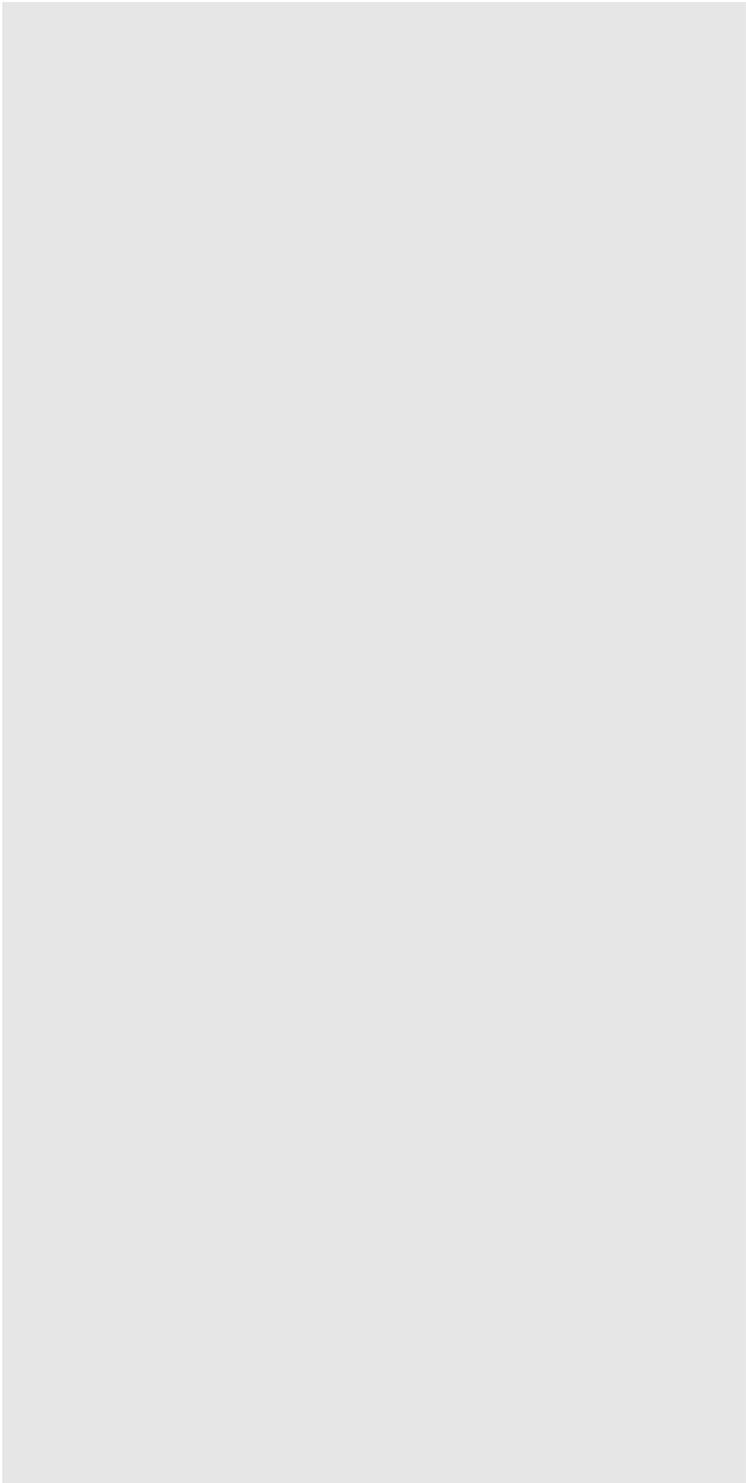
30. Choose EDIT→COPY from the menu bar.
 31. Draw a rectangle under the table, for example.
 32. Install a graph in the selected rectangle with DRAWING→GRAPH TYPE→GRAPH.

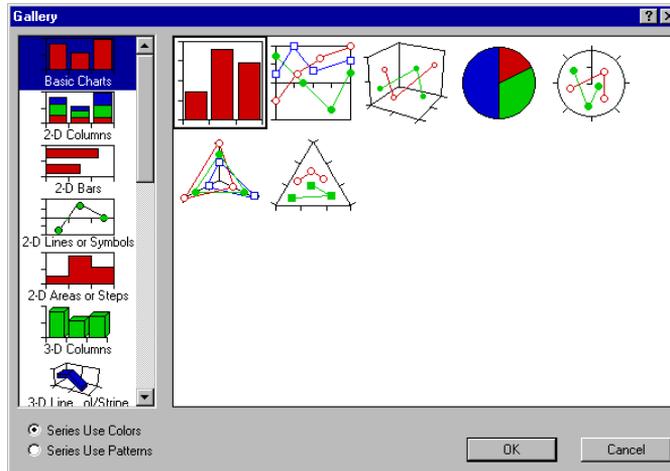


33. Click in the graph. The graph tool appears in the tool bar.



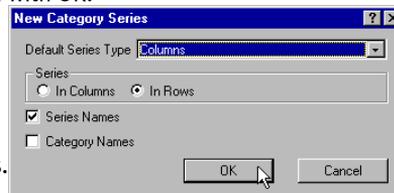
34. Choose EDIT→PASTE from the menu bar.
 35. In the GALLERY dialog box which appears, you can pick an appropriate graph type from the hundreds available.





36. In the gallery, select the COLUMN GRAPH from the panel BASIC CHARTS and confirm the selection with OK.

37. The dialog box NEW CATEGORY SERIES appears. Confirm the settings with OK.

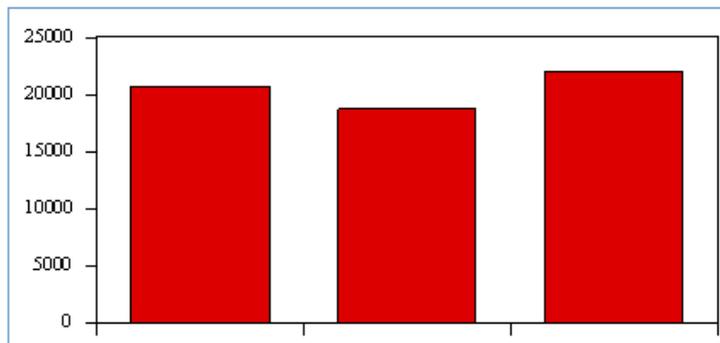


38. The following graph appears.

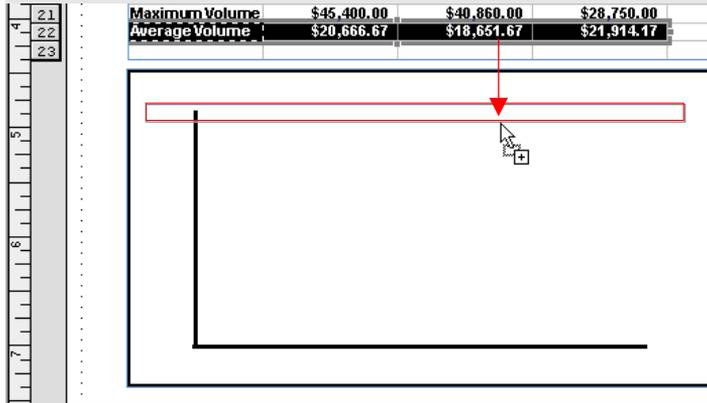
You can edit the graph further. For example, a title and the legend are missing. Experiment with the ARRANGEMENT panel in the GRAPH INFORMATION dialog box (GRAPH → GET INFO → ARRANGEMENT).

You can change all other settings in the information dialog box, as usual in RagTime 5. Select elements in the graph by clicking and open the dialog box. In most cases, you can combine selecting and opening in one double-click.

In complicated graphs with numerous elements, it is sometimes difficult to hit a particular element with the pointer. For this reason, you can also select all elements and their parts in two menus in the tool bar and in the GRAPH INFORMATION dialog box.

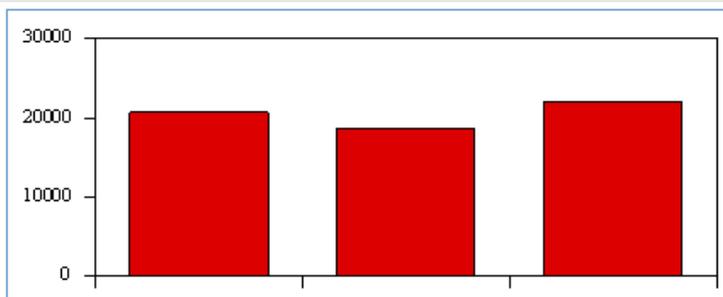


You can drag data from the spreadsheet directly into the graph. When you move the pointer to the border of the selected cells, the move pointer appears.



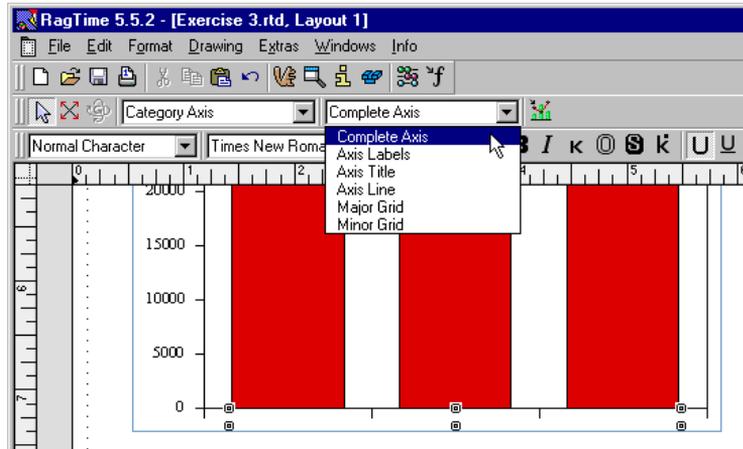
Press the mouse button and drag the cells into the graph. A ghost rectangle represents the cells being dragged. When a pattern appears in the graph, release the mouse button to make the data available to the graph.

RagTime fits the axis labels in the space available. If you have drawn a somewhat smaller rectangle, the labels will appear at other intervals.



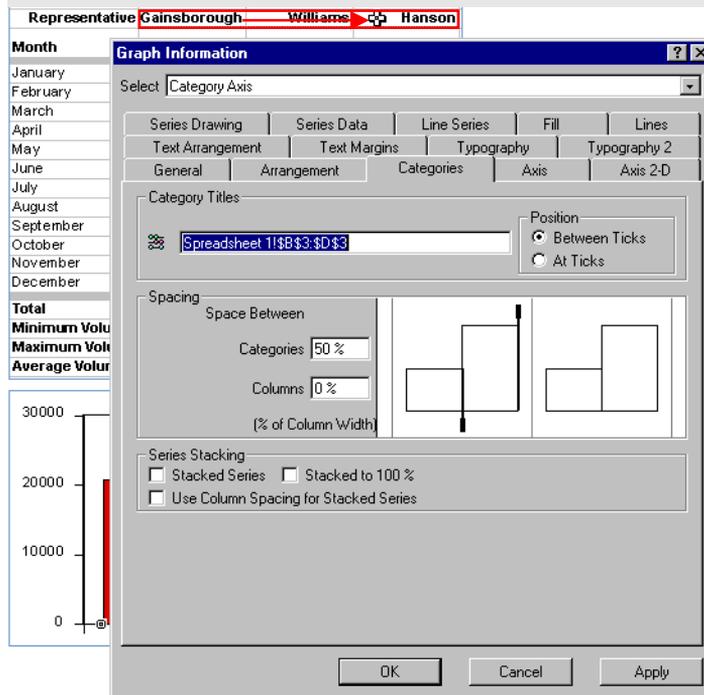
Try to put labels on the category axis using the following procedure: Call up the INFORMATION DIALOG and pick the CATEGORIES panel. Click in the field CATEGORY TITLES to the right of the ABACUS. Enter the following names “Gainsborough”; “Williams”; “Hanson”; as a list using formula orthography (that is, with quotation marks and semicolons). Confirm your entries by clicking OK.

Feel free to experiment with other settings.



When you want to enter formulas in dialog boxes, you can type them directly in formula entry fields. Frequently the formulas contain spreadsheet cell references which you can create more easily by clicking the cells, just as you do when working with the formula palette. Click in the appropriate formula field to the right of the ABACUS and then click or drag across the desired cells in the spreadsheet. A ghost border marks the cells. When you release the mouse button, the reference is entered in the formula field.

If the cells are hidden by the dialog box, you can drag the box aside.



A Did you know that you can also select individual data points from a row and format them differently from the other entries? The first time you click on a row, you select the entire row. The second click lets you select an individual data point. You can then assign formats to the data point by using the **FORMAT** menu.

4.5 Exercise 4: Packaging Sells Products—Designing a Package

- Goals* In exercise 4, you will get to know the “drawing” component. You will learn to
- differentiate between drawing in a layout component and drawing in a drawing component,
 - draw with various tools,
 - save work by duplicating objects,
 - group objects.

The completed drawing, prior to decoration, should look similar to the illustration. For orientation purposes, the drawing objects are numbered. Identical objects have the same number.

The drawing represents the plans for a package for small items such as antifog cloths, thin insulation blankets and so on, like those you find on the display stands of a car parts store.

Drawing in Layout and in Drawing Components

Drawing in a layout Thus far you have used drawing tools to draw various objects on a layout page. These were then used as containers to which you assigned particular types of contents. We call this kind of drawing “drawing in a layout.” Drawing in a layout is mainly for structuring pages and making containers available for components such as text, pictures, spreadsheets, and so on.

Drawing in a drawing component In addition to components like spreadsheets or texts, there are also drawing components in which you can draw with the same tools as in layouts. In contrast to layouts, drawings are not bound to a particular page size. We call this kind of drawing “drawing in a drawing component.” Drawing in components is primarily for creating illustrations, for example. Such a drawing may be installed in a layout in numerous places, if desired, and may be easily scaled and positioned.

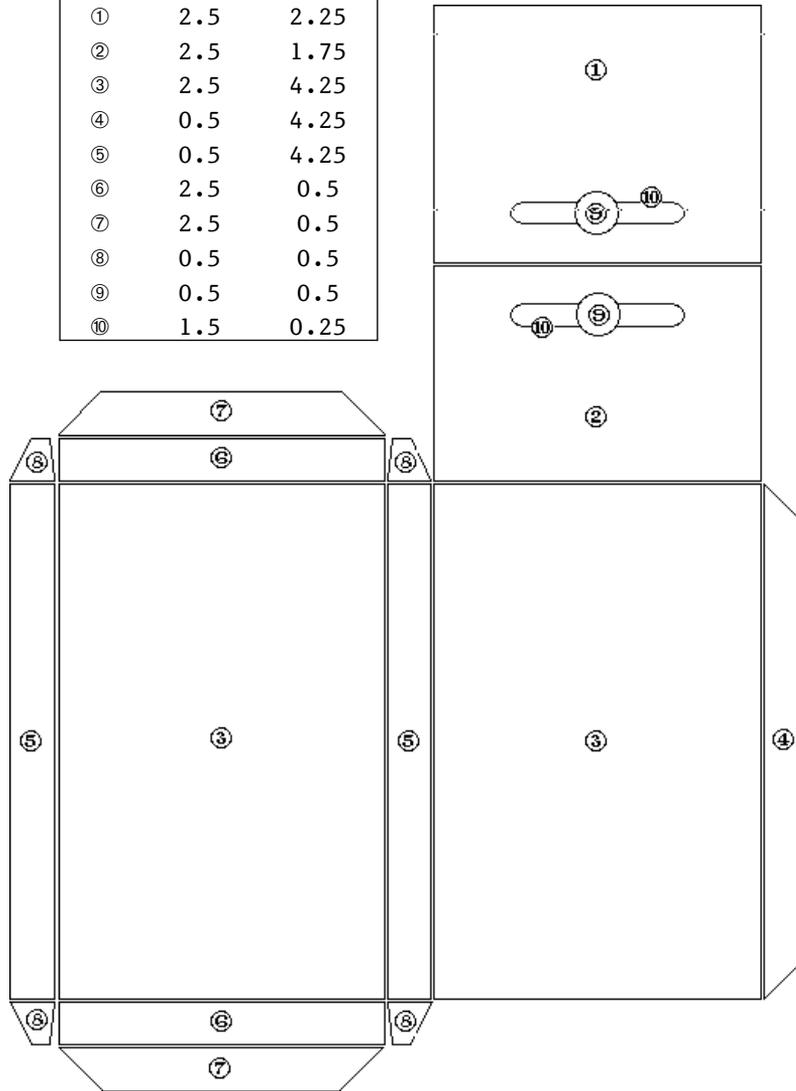
Beginning with a Drawing Component

Choose **START** → **PROGRAMS** → **RAGTIME** → **RAGTIME** or your favorite method to start the program. Choose **FILE** → **NEW BEGINNING WITH** → **DRAWING**. A window with a drawing opens, and the tool bar contains the drawing tools.

Don’t forget to save! Name the file “Package Design”; this name will appear in the window’s title bar.

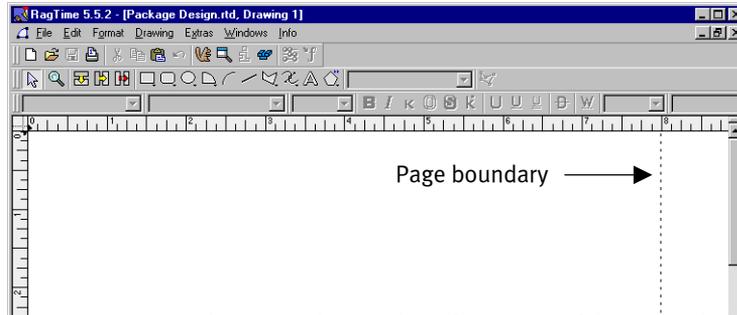
🔗 Please save regularly

object	width in	height in
①	2.5	2.25
②	2.5	1.75
③	2.5	4.25
④	0.5	4.25
⑤	0.5	4.25
⑥	2.5	0.5
⑦	2.5	0.5
⑧	0.5	0.5
⑨	0.5	0.5
⑩	1.5	0.25



New Beginning with...

Please note that RagTime 5 does not have different types of documents for drawings, layouts, spreadsheets, and so on. With the command FILE→NEW BEGINNING WITH→..., you merely specify what to start with. You can add further components at any time by choosing WINDOWS→NEW COMPONENT→... and combine them with the existing components without starting a new document.



RagTime provides you with a number of very powerful commands and drawing tools. They are located in the menu bar and the tool bar, which you already know from creating drawing object in the previous exercises.

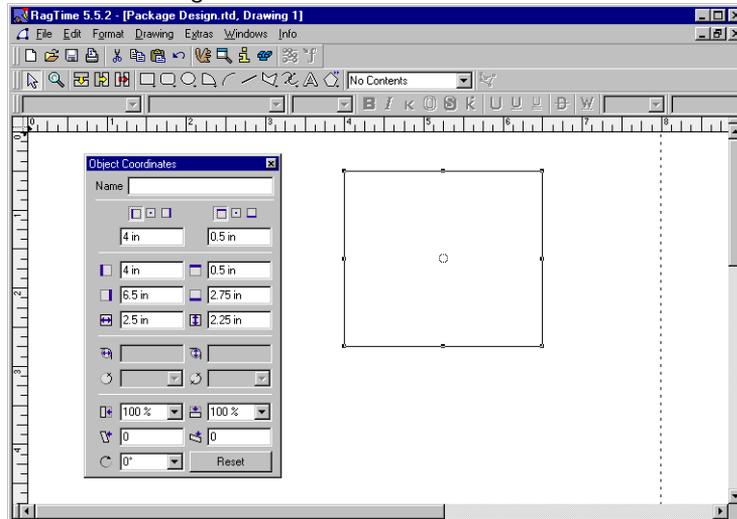
We will draw the package design in three steps.

- Drawing the rectangles (tool: RECTANGLE)
- Drawing the polygons (tool: POLYGON)
- Drawing the “punch out” (tools: ROUNDED RECTANGLE and OVAL)

Drawing the Rectangles

The rectangles are the objects numbered ①, ②, ③, ⑤ and ⑥ in the package design.

1. Choose the RECTANGLE tool from the tool bar.
2. Draw rectangle ① approximately as it appears in the following illustration. The eight handles are visible.



3. Choose WINDOWS ➤ PALETTES ➤ OBJECT COORDINATES from the menu bar. The OBJECT COORDINATES palette opens, showing the coordinates of the selected object.

RagTime 5 assumes that the objects which you draw on a page will serve as containers for displaying other components. Therefore, RagTime draws the objects with the line style sheet CONTAINER BORDER which makes sure that the lines are *not printed*.

In a drawing component, objects are generally used as rectangles, circles and so on, so RagTime applies to them the line style sheet NORMAL LINE, which causes the lines to be *printed*.

Please note that these are just default settings. Of course you can use any line style in layouts and drawings. And naturally, you can install components, for example texts or spreadsheets, in the objects contained in a drawing. You can install, for example, pictures or spreadsheets in texts, or drawings or audio files in spreadsheets...

You can change your preferences for line styles and style sheets used in layouts and drawings in the LINES panel of the dialog box opened by EXTRAS→DOCUMENT SETTINGS.

B / A To place a frame with a printable border around a text block, please proceed as follows:

1. Draw a rectangle with TEXT as the content type and write a few words in it.
2. Double-click the container border and select the DRAWING INFORMATION→LINES panel. Under STYLE SHEET, instead of CONTAINER BORDER, select NORMAL LINE, for example, and increase the line width to 0.75 pt. Click APPLY. This creates a clearly visible text frame.
3. Click the OBJECTS panel and enter 0.5 in in DISTANCE TO BORDER. Confirm your entry by clicking OK. There text now has a corresponding distance to the container border.

This procedure allows you to create text frames like those used in newspapers and magazines, for example.

You can also edit the coordinates in the COORDINATES panel of the dialog box DRAWING→GET INFO. In the corresponding fields, you will find the same icons used in the palette, so if in doubt, you can use the label in the panel to determine the meaning of an icon. Palettes are intentionally kept small so you can keep them open without their disturbing your work too much.

- Set the width of rectangle ① to 2.5 in. and the height to 2.25 in.

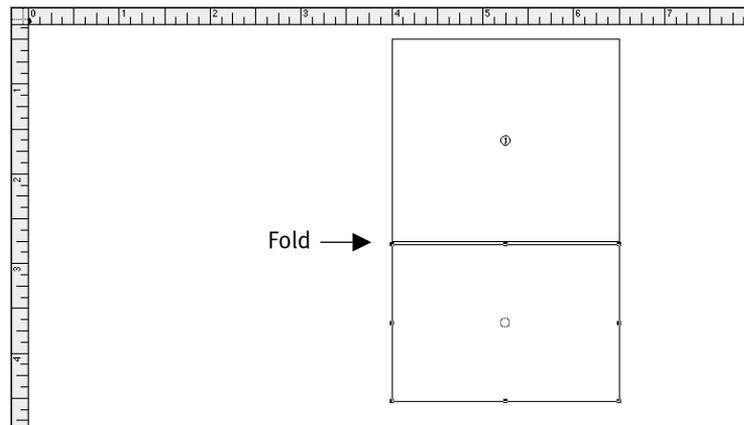
Leave the palette open; it will serve you well later. If it is in the way, drag it to the side.

You can create rectangle ② in the same way. However, you can simplify the job substantially by duplicating rectangle ①.

- Select rectangle ① and use the command `EDIT`→`DUPLICATE`. You get a slightly offset duplicate of the rectangle. Because object ② has a slightly lower height than object ①, you must correct the height to 1.75 in. in the palette.

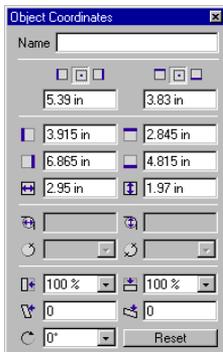
As you see, duplication is faster than drawing a new rectangle. This is particularly true when the original and the duplicate are identical or, as in this case, very similar.

- Move the modified rectangle to the position of rectangle ②. Be sure to leave space between the two rectangles for a fold. Your drawing should now look something like this:



Next you need rectangle ③. Since this rectangle occurs twice in the folding box, you need to create one and then duplicate it. But even the first step in production can be simplified. You can duplicate rectangle ② and change the height.

- Select rectangle ② and use `EDIT`→`DUPLICATE`. You get a slightly offset duplicate of the rectangle. Because object ③ has a height different from the original, you must change the height from 1.75 to 4.25 inches in the palette.
- Now move the modified rectangle to the position of rectangle ③. It may be wise to reduce the screen's display scale temporarily under `WINDOWS`→`DISPLAY SCALE`.

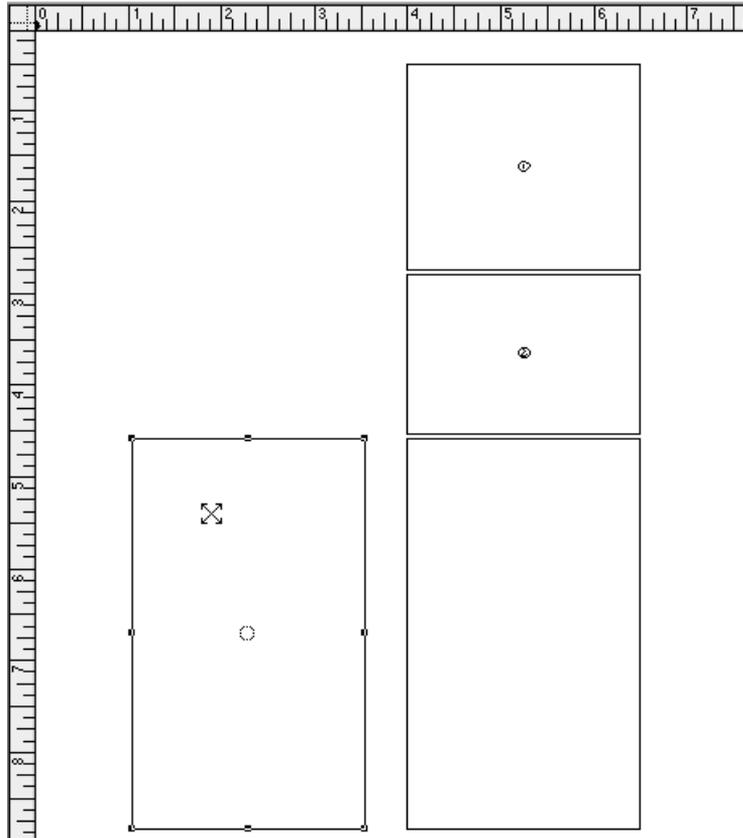


In the upper part of the OBJECT COORDINATES palette (and the corresponding part of the COORDINATES panel in the DRAWING INFORMATION dialog box), you see the position of an object. That is normally the middle of the object, which is marked by a circle in selected objects. If you change these numbers, the object is moved to another position without changing its height or width. With the buttons, you can switch the display of the two position values among left/middle/right and top/middle/bottom.

In the next part of the palette, you can see the coordinates for the borders as well as the height and width of the object. These values are mutually dependent. For example, if you enter a new value for the right border, the width changes, and vice versa.

B / A Here's an alternative way of duplicating objects: Press CTRL and drag the active object you want to duplicate to its new position. This creates a duplicate in the new position, leaving the copied object unchanged in its original position. Holding down the SHIFT key (⇧) while duplicating ensures that the duplicated object can be moved only vertically or horizontally.

9. Duplicate the rectangle with **EDIT** → **DUPLICATE** and position the duplicate to the left of the original.



10. Now draw rectangle ⑤. Watch the **OBJECT COORDINATES** palette while drawing and try to get the correct width (0.5) and height (4.25 in.) immediately. If you are not successful, enter the values in the palette.
11. Make a duplicate of rectangle ⑤ and move it to the proper location.
12. Proceed in the same manner for both rectangles ⑥. Make duplicates here as well. Your layout should resemble the following illustration:



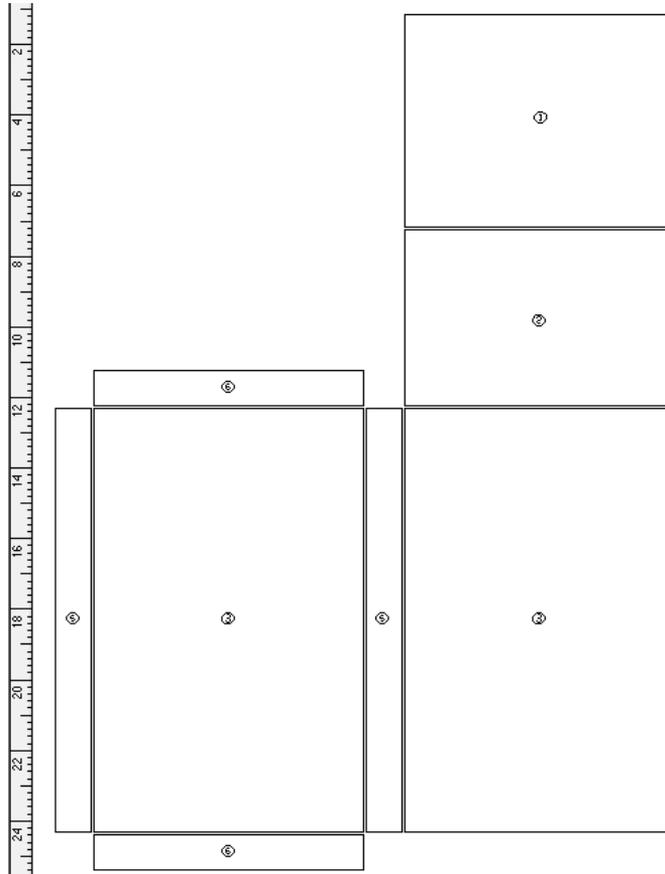
B / A A quick way of enlarging a section on your screen when is to make use of the **MAGNIFYING GLASS** tool. Mark the section you wish to enlarge by dragging open a frame around it. The smaller the frame, the greater the enlargement.

Alternatively, you can rapidly enlarge the display scale by holding down the **CTRL** and **9** keys simultaneously. Pressing **CTRL + 7** reduces the size.

A Do you want to have several screen display scales at the tip of your fingers? Simply assign the corresponding menu commands to the function keys of your choice. For example, you can program the function keys **F5–F8** with display scales of 25%, 50%, 150%, and 200%, respectively.

1. Choose **EXTRAS** → **COMMANDS**. This opens the **COMMANDS** window which lists all of RagTime's commands on the left.
2. Choose the group of commands called **WINDOW COMMANDS** → **DISPLAY SCALE** from the category list. There you will find a complete list of scaling options accessible under the **WINDOWS** → **DISPLAY SCALE** menu.
3. Select the 25% entry and click **CREATE**. The **ENTER SHORTCUT** screen message appears.
4. Choose the **F5** function key for our example.
5. RagTime records the function assigned to the key under **KEYBOARD ACCELERATORS**.
6. Follow the same procedure for the remaining display scales. If a command already has a keyboard shortcut assigned to it, both the new and the old shortcuts are displayed.
7. Once you have finished creating shortcuts for the display scales, exit the dialog by clicking **CLOSE**.

B / A If you want to use the same drawing tool repeatedly, you don't have to select it in the tool bar each time. While holding down the **CTRL** key, simply click where you want to draw the next object.



Drawing the Polygons

The polygons are the objects numbered ④, ⑦ and ⑧ in the package design.

13. Select the POLYGON tool from the tool bar.



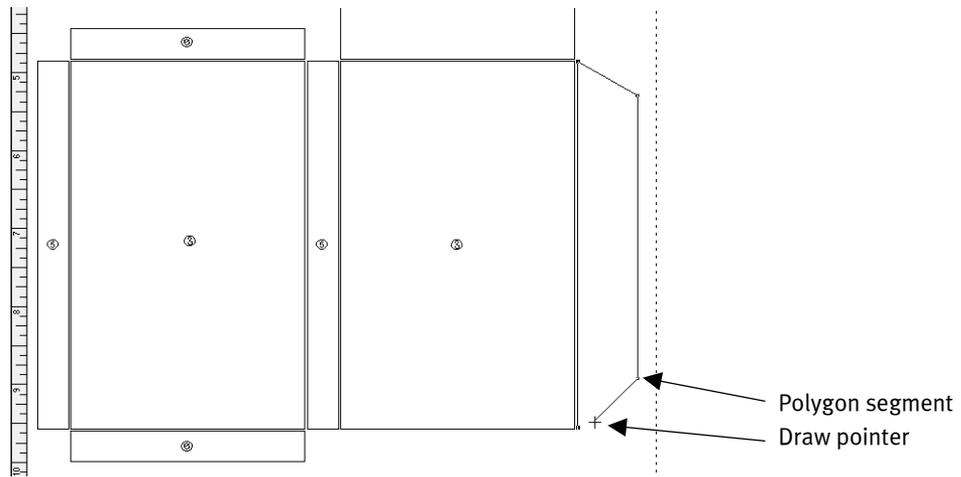
14. Begin drawing polygon ④ at an end point; click once each time you change the direction of the line. Orient yourself with the rulers on the left and upper sides of the window or on the OBJECT COORDINATES palette. They aid in creating symmetric angles. To make sure that the polygon is closed, conclude by clicking the first point once more.

A RagTime has a nifty feature for creating frequent angles such as 45°: If you hold down the SHIFT key (⇧) while drawing with the POLYGON tool, all angles are multiples of 15°. This way, you can easily create a 45° angle.

Should you want to draw an open polygon, end the drawing with a double click (⌘) to set the last point, or if you have already set it, end with CTRL + ⌘ on the last point.

The last polygon point is slightly magnetic to make it easier to hit.

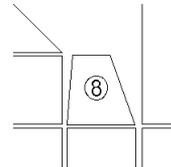
You can edit polygons and Bézier curves by selecting them and pressing ENTER. You can also ⌘ them or choose DRAWING → EDIT CURVE. The CURVE EDITING palette can be used to manipulate polygons and Bézier curves.



15. Verify in the OBJECT COORDINATES panel that the the width of the polygon is 0.5 inches and the height, 4.25 inches.

The two instances of object ⑦ differ not in form, but only in position. The same is true of the four instances of ⑧. Therefore, you will duplicate the objects as in other cases and get them in the correct position by rotating and mirroring them. RagTime provides commands for rotating and inverting drawing elements under DRAWING→TRANSFORMATION and other places. We will start with object ⑧.

16. Select the POLYGON tool from the tool palette.
17. Using the MAGNIFYING GLASS, enlarge the display scale by dragging open a rectangle around the area you're working on. Draw object ⑧ as it appears in the illustration.



18. Verify in the OBJECT COORDINATES palette that the width and height of the polygon are both set at 0.5 inches.

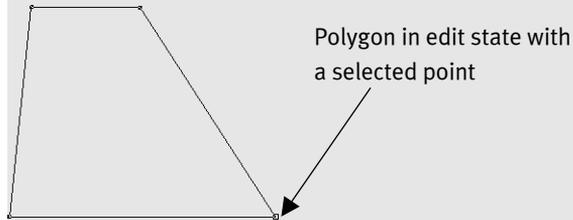
19. Choose EDIT→DUPLICATE three times from the menu bar. This creates three duplicates.
20. Click one of the duplicates. The handles appear.
21. Choose DRAWING→TRANSFORMATION→FLIP LEFT→RIGHT from the menu bar.
22. Reduce the display scale if necessary. Move the polygon to its place in the upper right corner.



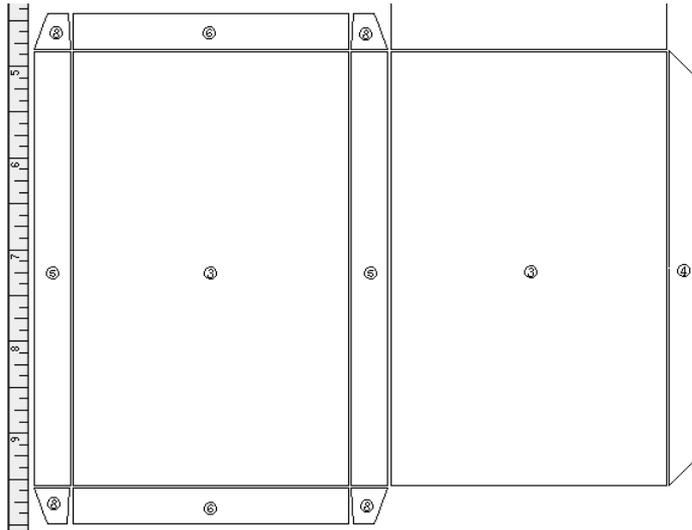


The individual points of a polygon are marked with handles which you can select by clicking and move with the mouse. For detailed work, you can move selected points with the arrow keys. Hold down the CTRL key at the same time to move the points in larger steps.

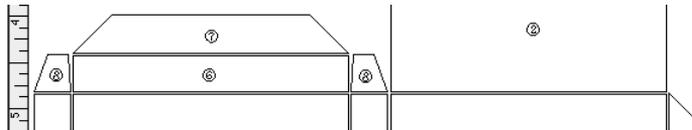
You can end the editing of a curve by selecting another object or pressing the ENTER key.



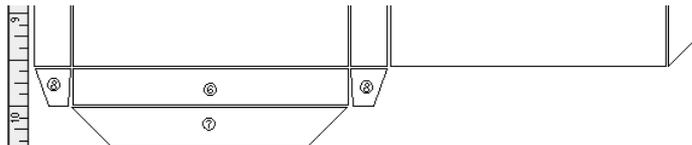
23. Proceed analogously with the other two duplicates of polygon ③. Use the other commands for transforming drawing objects as well. Move the transformed objects to their places. The result appears below:



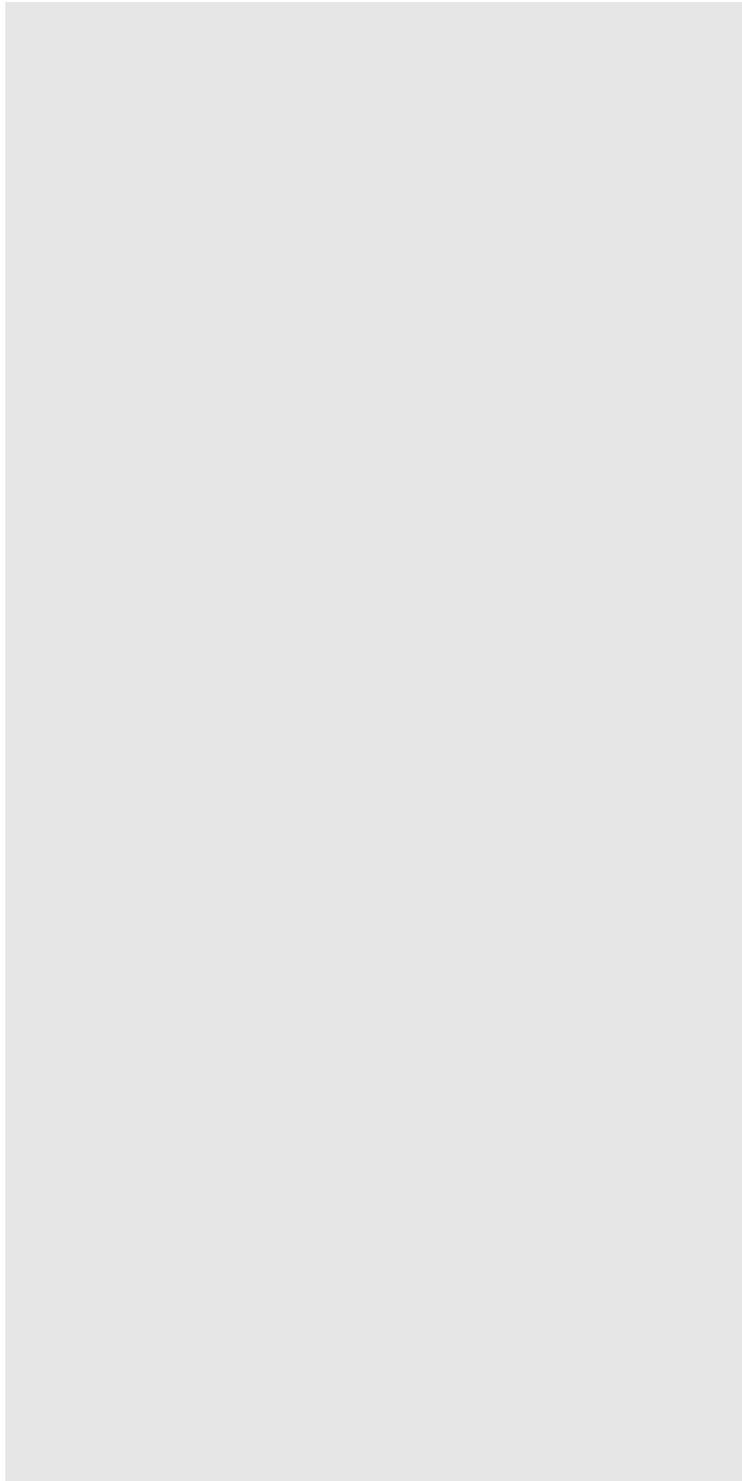
24. Select the POLYGON tool from the tool bar.
 25. Draw polygon ⑦ as described above. The result should look like this:



26. Check in the OBJECT COORDINATES that the width of the polygon is 2.5 inches and the height, 0.5 inches.
 27. Create a duplicate with EDIT → DUPLICATE.
 28. Select the duplicate and use DRAWING → TRANSFORMATION → FLIP TOP ↔ BOTTOM.
 29. Move the polygon to its place.



Now you have finished the sides (rectangles ① through ⑥) and the flaps (polygons ⑦ and ⑧) of the package design.



Drawing the Punch Outs

Because our package is supposed to hang from a display stand, a punch out is planned in the design (objects ⑨ and ⑩). First, increase the display scale by using the MAGNIFYING GLASS tool to drag open a rectangle around the area you're working on.

30. Select the OVAL tool from the tool bar.



31. Draw an oval with a width and height of 0.5 inch in rectangle ①, as shown for object ⑨ in the example. Check the size in the OBJECT COORDINATES panel.

32. Select the ROUNDED rectangle from the tool bar.



33. Draw a rounded rectangle in rectangle ①, as shown for object ⑩ in the example.

34. Check the size in the OBJECT COORDINATES panel (width 1.5 in, height 0.25 in).

35. Move the objects together so that they look roughly like this:



Changing the Stacking Order

The rounded rectangle, which you drew last, is in front of the circle. In the finished drawing, the order should be reversed.

36. Select the circle by clicking it.



37. Choose DRAWING → STACKING ORDER → BRING TO THE FRONT.

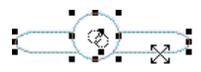


Aligning and Grouping the Drawing Objects

In the following steps, the two objects will be precisely centered and grouped in a single object.

38. Select objects ⑨ and ⑩. To do this, click object ⑨ and then, while holding down ⌘, click object ⑩.

Handles appear on both objects.



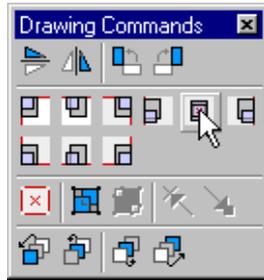
If you want to draw an object with equal height and width, of course you can draw very carefully or enter values in either the OBJECT COORDINATES palette or the DRAWING INFORMATION dialog box. But it's simpler to hold down the SHIFT key (⇧) while drawing. The RECTANGLE tool functions as a SQUARE tool, the OVAL tool, as a CIRCLE tool, and so on.

B / A If you want to select several objects together, you can enclose them in a box with the pointer. Only objects which are *completely* enclosed are selected. Be careful not to click *in* an object.



Another way of doing this is to drag open a selection frame that touches all the objects with your mouse while holding down the Shift (⇧) and CTRL keys.

39. Open the palette **WINDOWS**→**PALETTES**→**DRAWING COMMANDS**. The following palette appears:



40. Click the **CENTER** BUTTON. The objects are now centered.



41. Choose **DRAWING**→**GROUP** from the menu bar or use the corresponding icon from the **DRAWING COMMANDS** palette. RagTime will now treat the two drawing objects as one object.

42. Move the “punch out” group to its position in rectangle ①. Click any member of the group and drag. In the **OBJECT COORDINATES** panel, set the value of the horizontal middle of the group to the same value as that of rectangle ①.

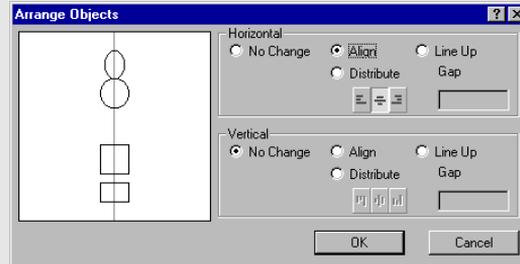
43. Select and duplicate the “punch out” group.

44. Move the duplicate to its position in rectangle ②. Take care that both punch outs are the same distance from the fold.

If you wish, you can add text and illustrate the package with a picture. Then print the drawing and cut it out to test its precision and usefulness.

The command DRAWING→ARRANGE OBJECTS provides a clever way to arrange objects. In a dialog box, you can make precise settings for their arrangement.

Draw several objects, select all of them, and try out the various possibilities.



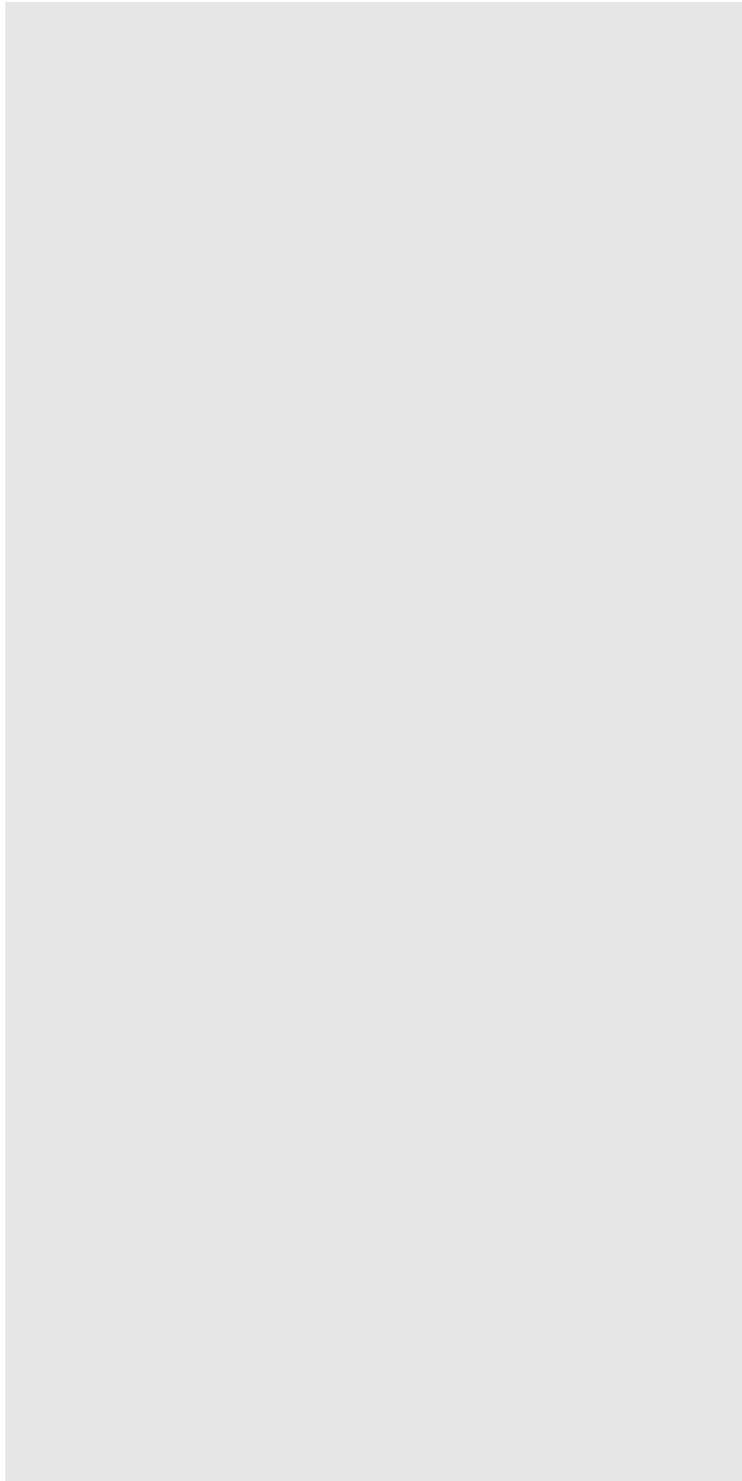
4.6 Highlights from This Chapter

General

- Components are the important elements of a RagTime document.
 - Components may be texts, pictures, spreadsheets and graphs, among others.
 - Each component, when active, has its own set of tools in the context sensitive tool bar.
 - Each component, when active, has its own menu in the menu bar.
 - Every component has its own information dialog box.
 - The information dialog box contains all the characteristics of an object.
-
- Drawing objects are created with drawing tools in the tool bar.
 - Drawing objects can have virtually any form.
 - Drawing objects may be moved, enlarged, reduced, rotated, mirrored, duplicated or deleted.
 - Several drawing objects may be grouped as a single element.
 - Drawing objects may be protected against moving.
 - Drawing objects may be used as containers for components. You can install a component via DRAWING→CONTAINER TYPE→..., by using the CONTENT TYPE tool, or by preselecting the content type before using the corresponding drawing tool.
-
- The layout of a document is structured with drawing objects and installed components.

Concerning Exercises 1 to 4

- Text may be formatted in various ways.
 - Frequently used formats are character formats like font, font size and font style. The most important character format commands are grouped in the first part of the FORMAT menu.
 - Additional formats are paragraph formats like margins, tabulators and alignment. The most important paragraph format commands are grouped in the second part of the FORMAT menu.
 - Never use the blank space key to align text.
-
- Spreadsheets consist of rows and columns. Columns are normally named with letters and rows with numbers (for example, column C, row 9).
 - Row height and column width can be adjusted as necessary.
 - The intersection of a row and a column is called a cell.
 - Every cell may be uniquely defined with the names of its row and



column, (for example, C9 designates the cell at the intersection of column C and row 9).

- Values or formulas may be entered in cells.
- A cell value may be a text, a multiline text, a number, a calendar date with time, or a time span.
- Formulas are created by joining cell addresses and constants using operators ($A7+B7*F17-1,5$).
- Formulas are entered and edited in the FORMULA palette.
- RagTime provides hundreds of functions (for example, the Sum function) in various fields including business, mathematics, statistics, and so on, which are available in the FUNCTIONS dialog box.
- Copying cell contents can speed up work with spreadsheets substantially.
- Copying cell contents can speed up work with spreadsheets substantially. Identical cell contents and data sequences can be duplicated or completed in the spreadsheet itself by selecting the cell entries in question and dragging the selection handle over the target cells, or by using a dialog accessible via SPREADSHEET → FILL Row...
- The presentation of texts and values in cells can be individualized with formatting.
- Numbers can be represented in graphs. RagTime offers hundreds of graph types.
- Numbers in spreadsheets can be used in graphs.

5

Step Two: RagTime Well Planned

Creating a RagTime Stationery Pad 🕒 Exercise 5: Our Business
Letter Needs More Pages 🕒 Exercise 6: He Who Sells Must Write
Bills 🕒 Highlights from This Chapter

5 STEP TWO: RAGTIME WELL PLANNED

5.1 Creating a RagTime Stationery Pad

Forms used in offices often come as gummed pads from which individual pages may be torn and filled out. RagTime has long been known for its sophisticated “form” feature which simulates such pads. This feature enables you to not only let your creative juices run free in designing the structure and order of stationery pad pages, but also to manage the pipelines to determine how and when pages are automatically torn off.

RagTime stationery pads thus fulfill a dual function: they are both time-saving and flexible. Repeated entries automatically flow into their predetermined components. You can configure pipelines and specify special rules to generate a reproduction mechanism when you want flowing text to generate a certain type of new page.

Goals

-> In this section, we will look first at an example which uses only pipelines which can be drawn between two containers.
-> Next, you will see how to create a simple stationery pad in RagTime. In the accompanying exercise, we will show you what circular pipelines are and what role they play in the construction of more complex stationery pads.

What Are Pipelines

A pipeline is a connection between two containers which enables the contents of one container to flow into the other. It makes no difference if the containers are on the same or different pages.

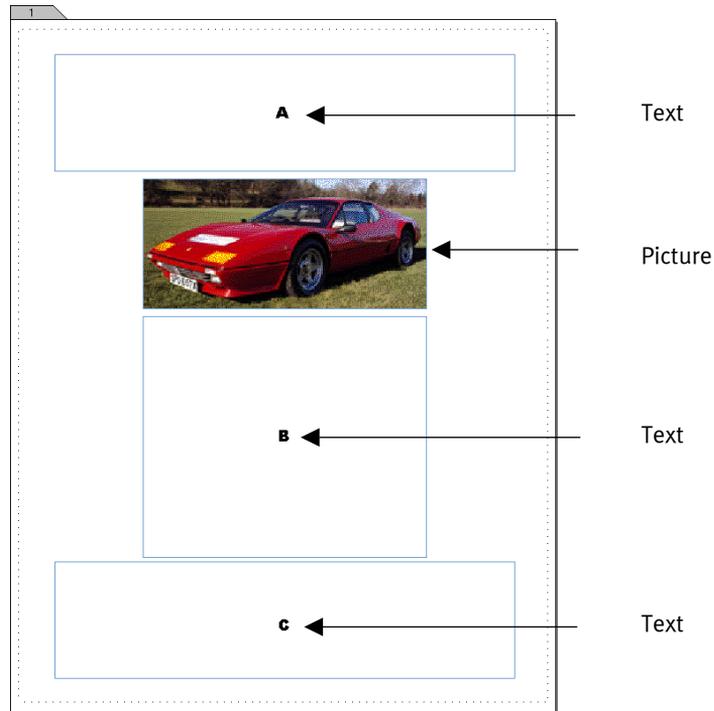
Beginning a New Document

Choose START.....>PROGRAMS.....>RAGTIME.....>RAGTIME or your favorite method to start the program. If RagTime is still running since the last exercise, then choose NEW DOCUMENT from the FILE menu. A window containing a layout opens, and the tool bar contains the layout tools. Delete the active standard rectangle using the DELETE key. (It has a mechanism for creating new pages which would get in our way during this task.)

Pipelines on One Page

Now design a layout to match the following sample, with three rectangles, two for text and one for a picture (DRAWING.....>CONTENTS TYPE.....>TEXT/PICTURE). The picture of the car is located in the folder “RagTime\Examples\Training.”

Only the contents types *texts* and *spreadsheets*, which can actually flow, may be distributed with the aid of pipelines in multiple containers.



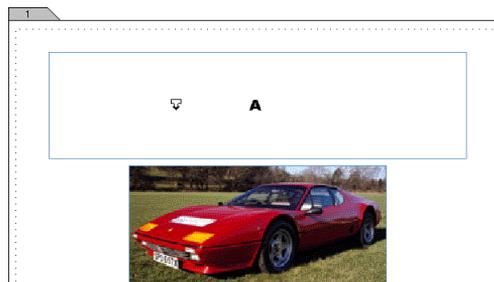
The text in the three text containers changes according to the car model that you want to describe. It may be longer or shorter, depending on the car. Therefore, you need a dynamic connection between the text containers which responds flexibly to differing lengths of text. Sometimes all three text containers are needed, and sometimes only containers A and B. Pipelines are the ideal solution in such a situation.

Installing Pipelines

1. Choose VERTICAL PIPELINE from the tool bar.



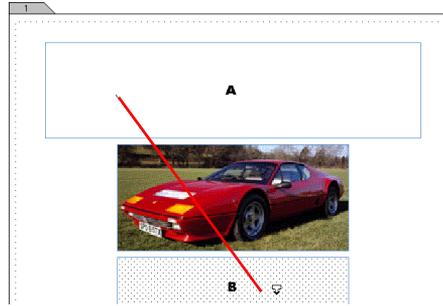
2. Move the pointer over container A. The pointer changes its form.





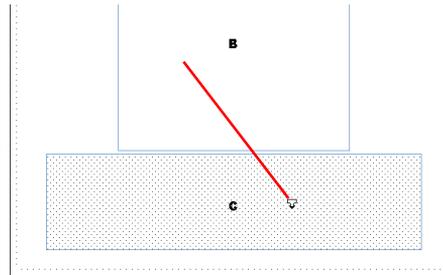
Three pipeline tools are available. Vertical pipelines can be used for texts and spreadsheets, and horizontal pipelines only for spreadsheets. You can cut pipelines with the third tool.

3. Now click in container A and, holding down the mouse button, drag the pointer to container B. A pattern appears when you hit the container. You can now release the mouse button.



4. Now make a pipeline between Containers B and C in the same way, and you are done. All three containers are connected with each other.

This means that when you write in container A, and it is full, the text flows into container B and from there into container C. If you then delete part of the text in container A or B, the text flows back. Try it out.



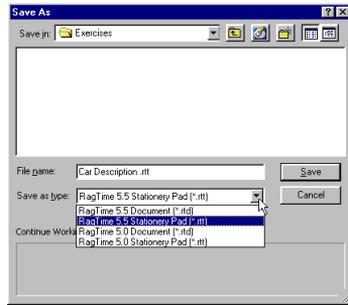
From Document to Stationery Pad

Assume that you will always want to use this design in the same form. Then you should make a stationery pad out of the document.

Before doing so, you should empty all components so that you don't have to repeat this work every time you tear off a copy.

If you want to check pipelines, you can display them on the screen with the command `WINDOWS→SHOW→PIPELINES`.

5. Choose FILE → SAVE AS. The following dialog box appears:



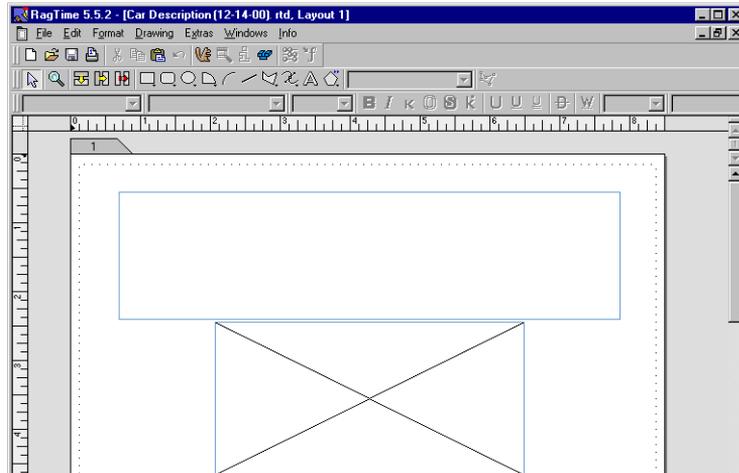
6. Check RagTime 5 Stationery Pad (*.rtt). Name the document “Car Description” and click SAVE. The document will then be saved on your hard disk as a RagTime stationery pad.



The Windows icon for a RagTime stationery pad shown here in the left margin appears.

Tearing Off from a Stationery Pad

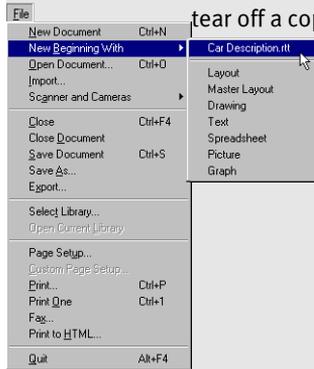
7. Choose FILE → OPEN DOCUMENT and select the stationery pad “Car Description” in the window that opens. Notice that the OPEN button is now labeled TEAR OFF. The following window appears:



The document has the name of the stationery pad extended with the current date. You can complete the document with a new text and picture and give it a name of your choice when saving it.

When you put a stationery pad in the folder “Stationery Pads”, RagTime provides a special service. The next time you start RagTime, you can select the pad from the FILE→NEW BEGINNING WITH→... menu and

tear off a copy.

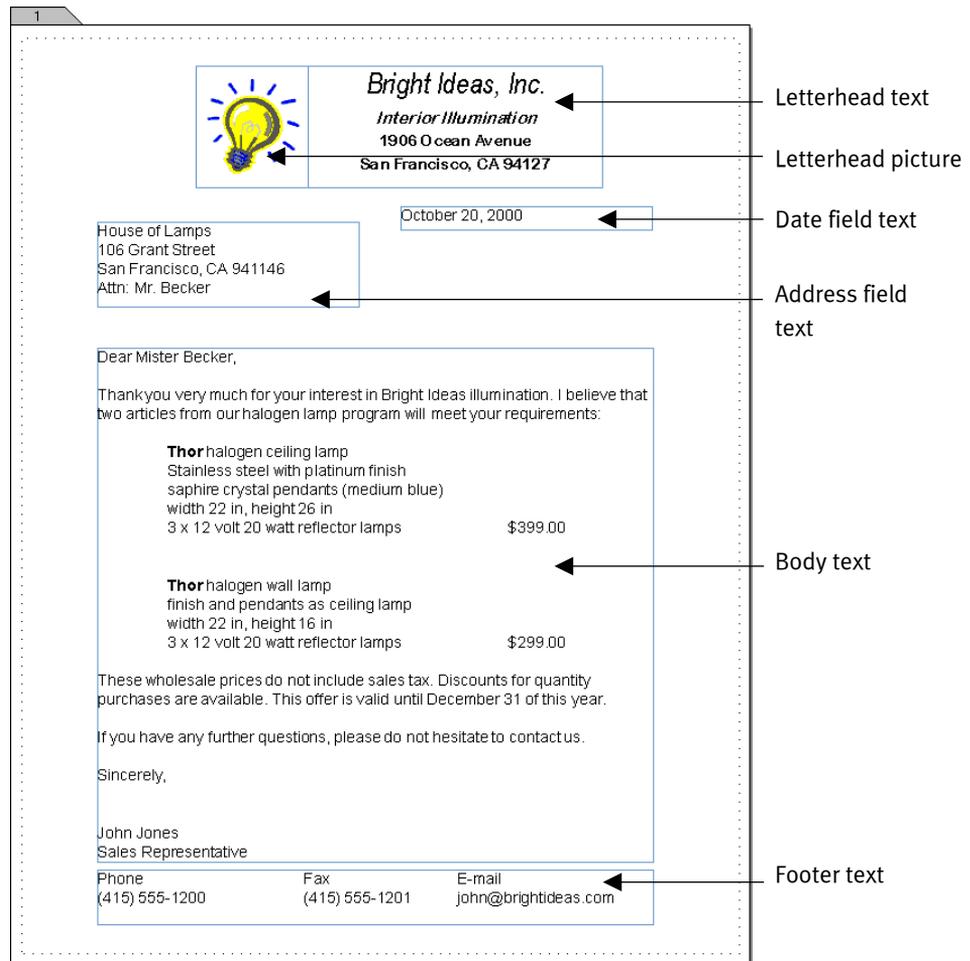


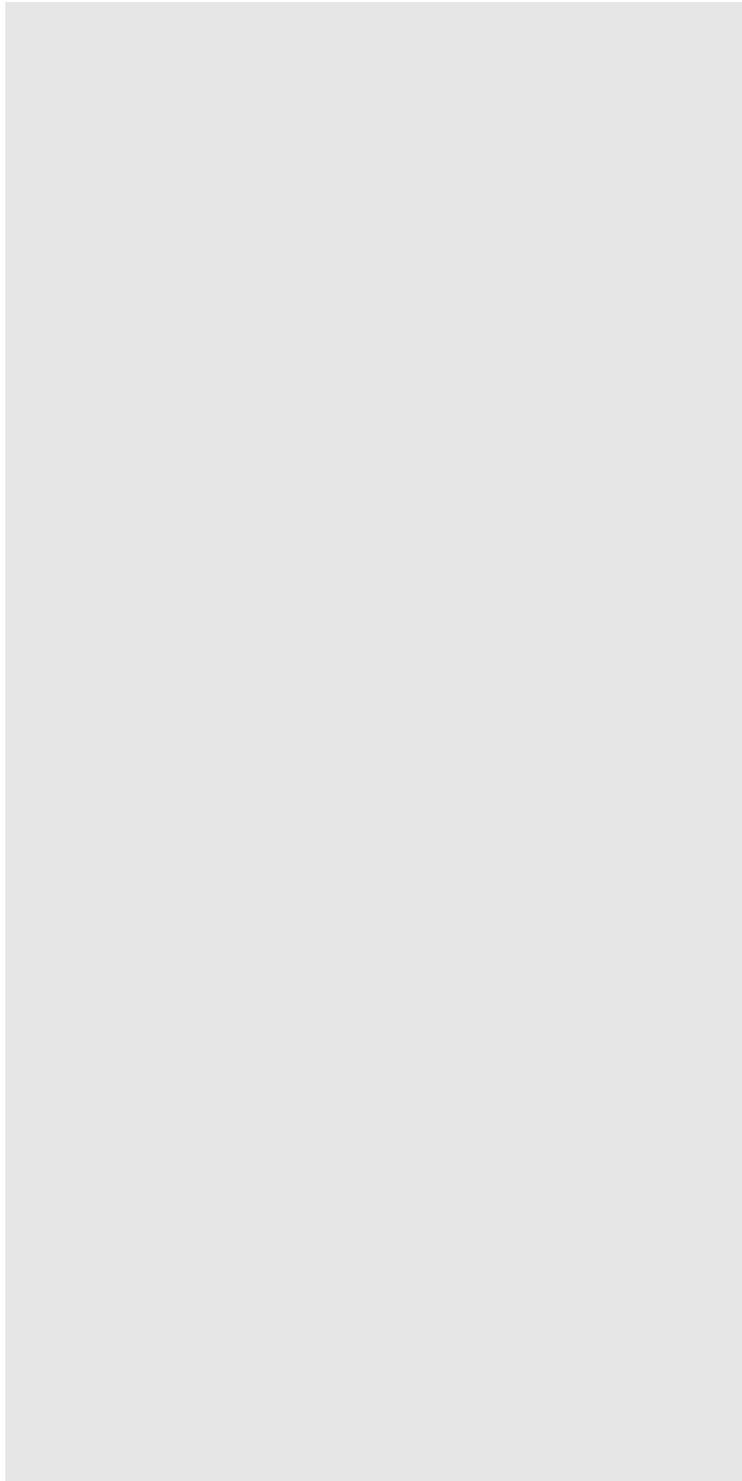
5.2 Exercise 5: Our Business Letter Needs More Pages

Remember our business letter from exercise 1? We wrote a bid for a customer, unfortunately under pressure, because the letter had to go out fast.

In this exercise, we will assume that you have more time to design the document, and what is more important than to facilitate quick, positive contact with a customer? When you do so in writing, for example, in a letter or a fax, RagTime stationery will serve you well.

Our present letter consists of one page with a number of components and has the following structure:





What the Stationery Pad Has to Do

What you urgently need is a second, a third, or more pages in case the bids become more extensive.

The requirements: The RagTime stationery pad must consist of

- Goals
- a first page like the existing one,
 - a second page having a different design, which may be appended as needed, and
 - additional pages having the same design as the second page, which may be appended as needed.

This is a classic situation for a RagTime stationery pad, that is, a form with capabilities that satisfy complex requirements. The document with a second page could look like this:

The image shows two pages of a stationery pad form. Page 1 (left) is labeled '1' and contains a logo for Bright Ideas, Inc. (a lightbulb), the company name, address (1998 Ocean Avenue, San Francisco, CA 94117), and contact information (Phone: (415) 555-1200, Fax: (415) 555-1201, E-mail: john@brightideas.com). There are two small rectangular input fields above a large rectangular text area. Page 2 (right) is labeled '2' and contains three input fields: Recipient's Name, Date, and Page 2 of 2. A large rectangular text area is below these fields.

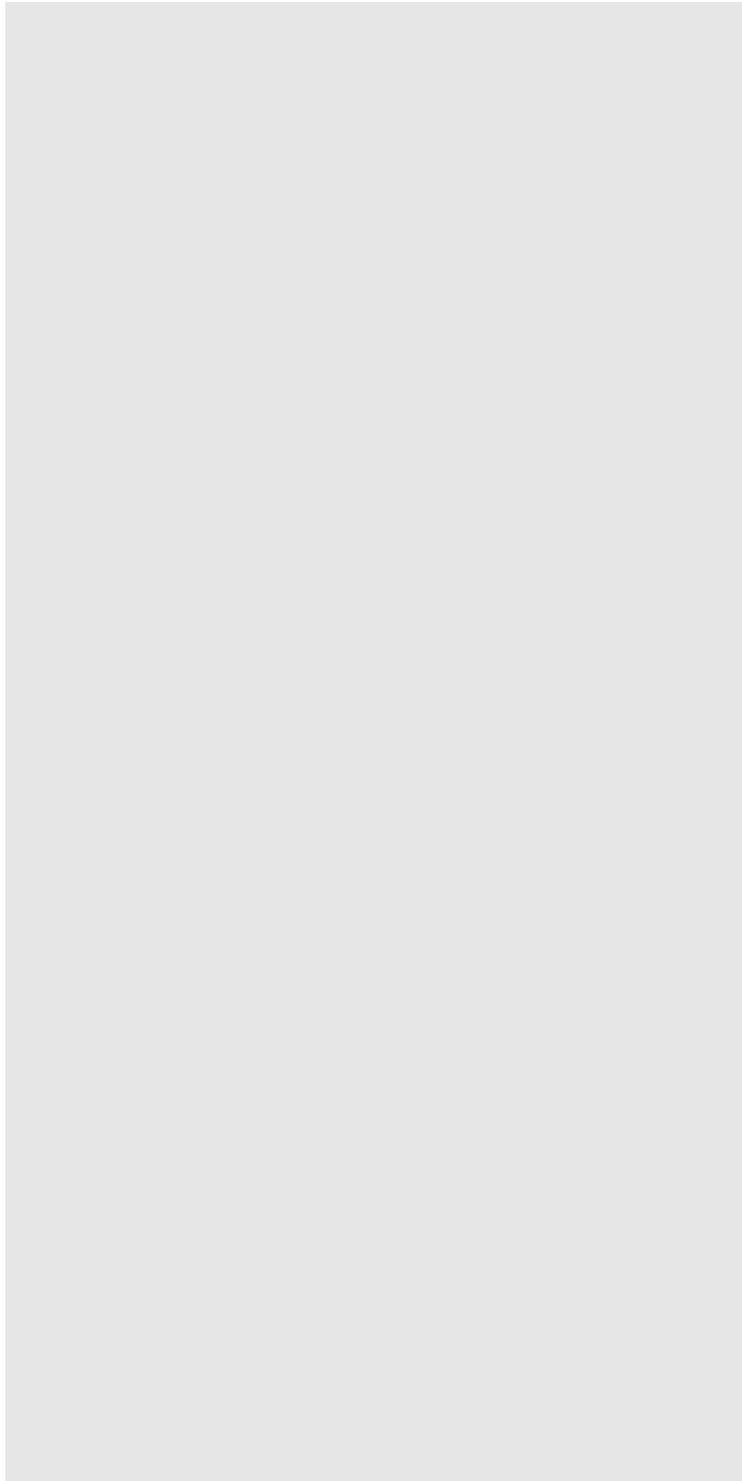
Designing a Layout

Since the first page already exists, in this exercise you need only to design the second.

We will now make use of a standard procedure RagTime uses to open new documents and that we already used when creating the first version of our business letter—probably without your noticing it.

This page consists of two texts, one for the body of the letter and one for the header with the recipient's name, the date, and the page number.

The image shows two pages of a stationery pad form. Page 1 (top) is labeled '1' and contains contact information for Bright Ideas, Inc.: Phone (415) 555-1200, Fax (415) 555-1201, and E-mail john@brightideas.com. Page 2 (bottom) is labeled '2' and contains three input fields: Recipient's Name, Date, and Page 2 of 2. A large rectangular text area is below these fields.



Appending a Page

1. Open the document “Business Letter” from exercise 1. Delete the texts from the address, the date, and the body.
2. Choose EXTRAS→ADD PAGE from the menu bar. The second page “inherits” the standard rectangle from the first page, which you can tell since the rectangle is not as far up as usual. Drag the frame vertically so that it matches our example. Then draw the rectangle for the header on page 2. Align the header and body if necessary (using DRAWING→ALIGN).

Adding Text to the Letterhead

3. Select the rectangle for the letterhead on the second page and choose DRAWING→CONTENTS TYPE→TEXT.
4. Click in the letterhead container and type “Recipient’s Name” in the first line and “Date” in the second as reminders that this data must be placed here later. Choose a smaller font size if needed.



5. In the third line type “Page” and type a blank space after it.
6. Choose EDIT→INSERT SPECIAL TEXT→PAGE NUMBER from the menu bar. The number “2” appears. Type another blank space. Type the word “of” and then another blank space.
7. Choose EDIT→INSERT SPECIAL TEXT→NUMBER OF PAGES from the menu bar. The number “2” appears again. The letterhead of the second page is finished.

Completing a Circular Pipeline

In RagTime, circular pipelines are used to add pages. Here, it employs the business letter’s replicating mechanism to ensure that when a new page is added, it always has the same structure. You create a circular pipeline by drawing a pipeline inside a single container, in this example, the one for the body of the letter on the second page. The following steps are necessary:

8. Select VERTICAL PIPELINE from the tool bar.



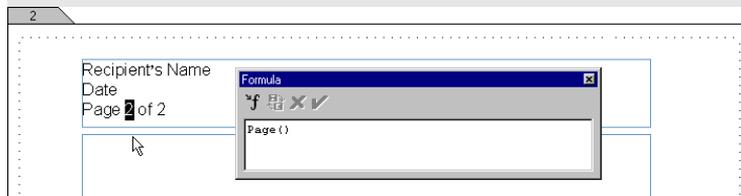
9. Drag a pipeline within the body container on the second page.



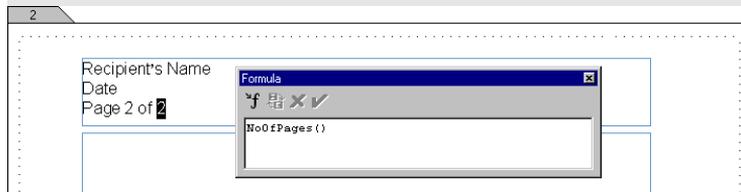


A The commands **EDIT** → **INSERT SPECIAL TEXT** → **PAGE NUMBER** and **NUMBER OF PAGES** are shortcuts for entering formulas in text components. Like many other things in RagTime, page numbers are calculated with formulas and functions. You can also enter a formula in a text component in the usual way. You will see how to enter formulas in the following exercises.

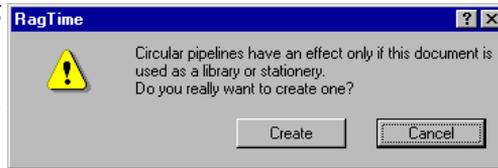
If you so wish, you can view the page number here as a formula. Select the page number which you inserted and open the **FORMULA** palette by clicking the **ABACUS** in the tool bar. You should see the following formula in the palette:



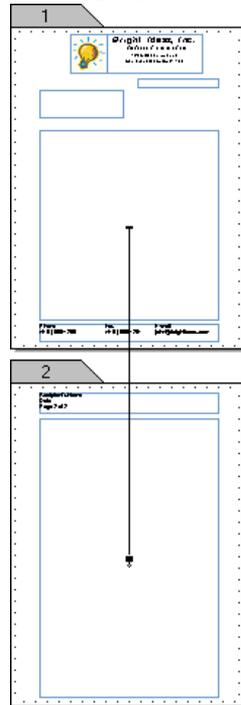
If the value expressing the number of pages is selected, the formula should look like this:



10. Confirm the dialog box by clicking CREATE.
11. Render the existing pipelines visible by going to **WINDOWS** → **SHOW** → **PIPELINES**. The circular pipeline symbol appears in the middle of the container. It indicates that the second page will be added as the third, fourth, fifth, and so on, as needed.



Checking Pipelines



We generated the body on the second page by choosing **EXTRAS** → **ADD PAGE**, making page two “inherit” the standard rectangle from page one. The advantage here is that either page is “aware” that the other exists, which allows for text to flow through a pipeline from the first into the second rectangle, if necessary.

12. Take a moment to think about what the stationery pad we’ve generated is capable of: Pages one and two are connected by a black line which represents the pipeline. On the second page, you can see the circular pipeline displayed as a circle tagged onto the end of the line. It, too, ensures that new pages with the same characteristics can be added.

You will learn how to lay pipelines connecting several containers in empty layout pages at the end of this exercise.

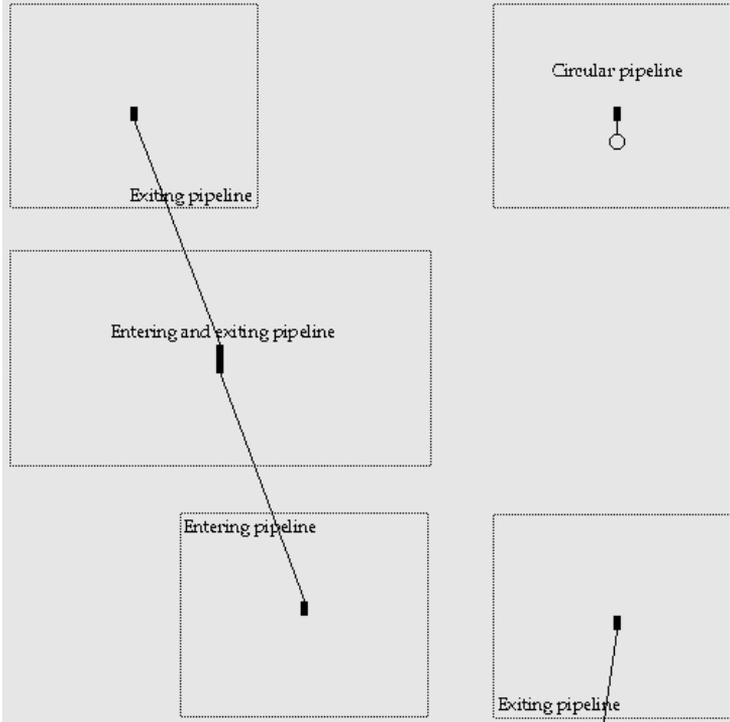
Tear-Off Settings

When you tear off a copy from a stationery pad, normally the entire document is duplicated and the duplicate is opened. In this case, however, only the first page should be torn off initially. Additional pages should be added only as needed.

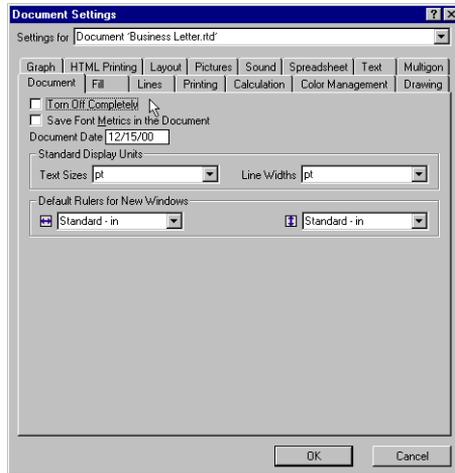
13. Choose **EXTRAS** → **DOCUMENT SETTINGS**. A panel dialog box opens. In the menu at the top of the box, you can specify whether you want to change the settings for **NEW DOCUMENTS** or the **CURRENT DOCUMENT**. Choose the **CURRENT DOCUMENT**.

If you want to install pipelines between objects which do not yet have any contents, a pipeline symbol is shown in the middle of each object. When the connected objects are given contents, the symbol disappears and the contents are visible. You can prepare objects with pipelines in , for example, stationery pads and later decide if you want to install text or a spreadsheet.

If you want a screen display of the pipelines to objects having contents, choose **WINDOWS**→**SHOW**→**PIPELINES**.



If you move the pointer over a pipeline close to the pipeline terminal symbol, the pointer changes to a “pedestrian.” If you then click, the other end of the pipeline is displayed. If necessary, the window display is changed.



14. Select the DOCUMENT panel, turn off TORN OFF COMPLETELY and click OK. Now only specially marked parts of the document will be torn off. In a layout, that is normally the first page.

Saving the Document as a Stationery Pad

The following procedure is the same that you performed in an earlier exercise for the simple stationery pad.

15. Choose FILE → SAVE AS.... The SAVE dialog box opens.
16. Name the stationery pad “New Business Letter” and select “RagTime 5 Stationery Pad (*.rtt)” as the document type.
17. Click SAVE. The document is saved on your hard disk as a RagTime stationery pad.

Tearing Off a Page from the Stationery Pad

18. Choose FILE → OPEN DOCUMENT and select the stationery pad “New Business Letter” in the dialog box. Note that the OPEN button is now called TEAR OFF.
19. The document has the name of the stationery pad extended with the current date. You can complete the document with current data and rename it when saving it.

Appending Pages

Pages may be added in several ways to a layout torn from a stationery pad.

- You can choose the command EXTRAS → ADD PAGE.
- The stationery may add a page automatically. If a container has a pipeline to a container on another page, when the first container is full, the other page is torn from the stationery pad and inserted in the current layout.

Document Date

You will find the document date in the DOCUMENT panel of the command EXTRAS→DOCUMENT SETTINGS. RagTime sets it when creating a new document. Afterwards, it will not be changed automatically, but you can change it manually.

You can access the document date with a formula or by choosing EDIT→INSERT SPECIAL TEXT→... from anywhere within the document. It is practical, for example, to use this date to date letters in a letter stationery pad.

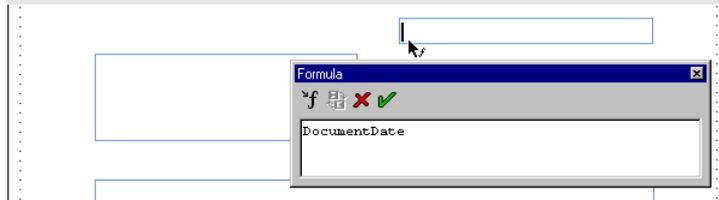
RagTime enters the correct date when tearing off a copy from the stationery pad, and the letter's date corresponds to the day on which you created the document.

1. Click in the date area in the second reference line.
2. Choose EDIT→INSERT SPECIAL TEXT→DOCUMENT DATE (SHORT). RagTime enters the date.

Alternatively,

since RagTime uses formulas internally to insert document dates, you can also do so with a formula.

1. Click in the date area in the second reference line.
2. Open the FORMULA palette by clicking the ABACUS in the tool bar and enter the function DocumentDate.



3. Confirm the formula by pressing ENTER. The date appears.
Now, if you save the document as stationery and later tear off a copy, your letter will automatically have the correct date (if the clock in your computer is correct).

A Entering a date with a formula may require an additional step to generate the desired result. Nevertheless, this method is more versatile in terms of usability. It makes formulas available which you can use to insert the current date (not the document date) or the value of the current calendar week anywhere in your document. Just take a look at the range of available functions in the FUNCTIONS dialog!

.....> If the container in the stationery pad has a circular pipeline—as is the case on our page two—the same page is torn off and inserted in the current layout.

20. Type some text in the body of the letter. When the bottom of the container is reached, a second page is appended according to the rules mentioned above.

21. Continue typing until page two is full. An additional copy of the second stationery page appears as the third page of your letter. Note that the page number and the total number of pages change accordingly on both page one and page two.

Pipelines Laid by the User

.....> Additional Exercise

1. Open a new document and get rid of the default standard rectangle using the DELETE key.
2. Append a second page by going to EXTRAS.....>ADD PAGE.
3. Position several text rectangles and a rectangle with the content type No CONTENT on both pages.
4. Lay pipelines between the rectangles in the order of your choice using the VERTICAL PIPELINE tool. Please note that each rectangle—with the exception of the first and last one—may contain only one incoming and one outgoing pipeline.
5. Draw a pipeline from a text rectangle to the rectangle with No CONTENT. Did you notice? The target rectangle is now ready for text, just like the others. Keep your eye on the pointer above the target rectangle or select it to verify its content type, e.g. with the CONTENT TYPE tool.
6. Finally, have a look at how the text that was entered into the first linked rectangle flows over into the next one when it runs out of room. If you intend to fill a rectangle with text only partially, you can force RagTime to interrupt the text flow within the rectangle by choosing FORMAT.....>START OF PARAGRAPH.....>NEXT CONTAINER.

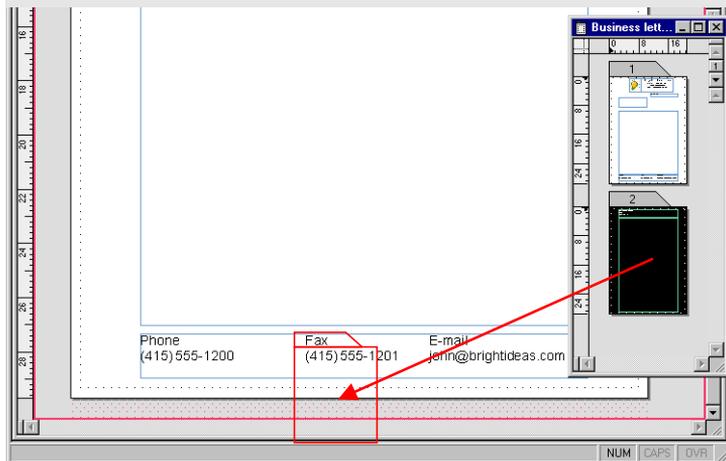
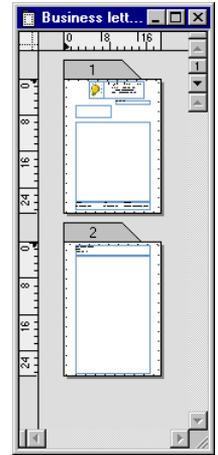
Libraries

Whenever an entire page is transferred from one RagTime document to another, for example, by tearing off a page from a stationery pad, the source document is registered as the library in the target document. If some document was already registered as the library in the target document, you will be asked before the library document is changed.

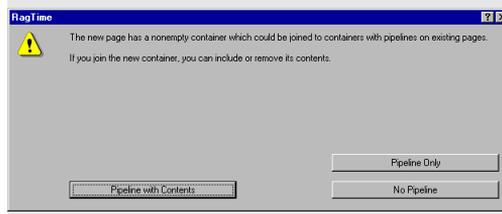
This is useful if you want to transfer additional pages from the same source document, that is, from the same stationery pad to the target document. You can open the source document as the library with the command **FILE** → **OPEN CURRENT LIBRARY**. (If no library has been registered, choose **FILE** → **SELECT LIBRARY**.)

The library document is opened so that it can be read but not changed. It appears in reduced scale on the right edge of the screen.

You can then drag pages from the library and drop them in other documents. The sensitive zone within which you can place them is below the target document. Please note that the target document's window must be active first.



If pipelines exist, you will be asked what should be done with the pipeline and its contents. Since the contents of the container on the page added from the letter pad are irrelevant, click **PIPELINE ONLY**.



5.3 Exercise 6: He Who Sells Must Write Bills

This exercise is a further example of how you can use the RagTime spreadsheet to produce a genuinely professional invoice.

In this example, you will learn

- Goals
- how easy it is to format an attractive invoice form,
 - how to use spreadsheet features in a “calculating letter form,”
 - how to incorporate the formulas which you already know in an invoice form, and
 - how to design a company logo without a lot of trouble.

The Structure of the Stationery Pad

The illustration of the invoice stationery pad on the opposite page consists of one rectangle with a spreadsheet installed in it and a rotated graphic text for the simple logo.

Beginning a New Document

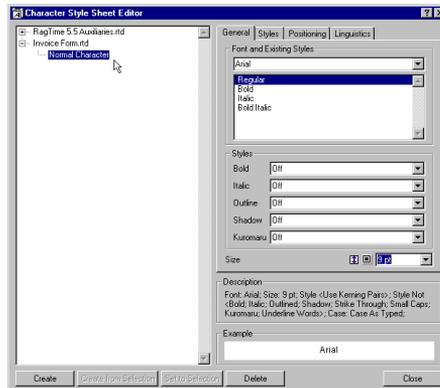
Choose **START** → **PROGRAMS** → **RAGTIME** → **RAGTIME** or your favorite method of starting Ragtime. If RagTime was left running since the last exercise, choose **FILE** → **NEW DOCUMENT** and start with a fresh layout. A layout appears in a window and the tool bar contains layout tools. Get rid of the default active standard rectangle. (It has a mechanism for creating new pages which would get in our way during this task.) Save the document with the name “Invoice Form.”

Save regularly

Preparing a Spreadsheet

In order to fit as much as possible into the invoice, it helps to create a smaller normal character before creating components.

1. Choose **WINDOWS** → **AUXILIARIES** → **CHARACTER STYLE SHEET EDITOR**. A window containing character style sheets opens. Select the **NORMAL CHARACTER** style sheet and set the font size in the **GENERAL** panel to **ARIAL, 9 pt**.



1

General Office Supply, Inc.
 1906 Ocean Avenue
 San Francisco, CA 94127

GOS

House of Lamps
 106 Grant Street
 San Francisco, CA 94127

Invoice
 Please refer to your invoice number, account number and date in all communications.

Account Number	12345
Invoice Number	9876
Shipping Date	10/23/00
Due Date	11/23/00

Ordered	Shippend	Item Number	Description	Unit Price	Extended Amount
10	10	87688	glue sticks	\$0.85	\$8.50
40	40	44458	erasers	\$1.15	\$46.00
15	15	66164	pencils 100 pack	\$24.50	\$367.50
30	30	63868	lined pads	\$2.50	\$75.00
25	25	42561	paper clips 100 pack	\$7.85	\$196.25
10	10	95241	desk sets	\$18.65	\$186.50
20	20	66384	3.5 in disks 10 pack	\$9.95	\$199.00

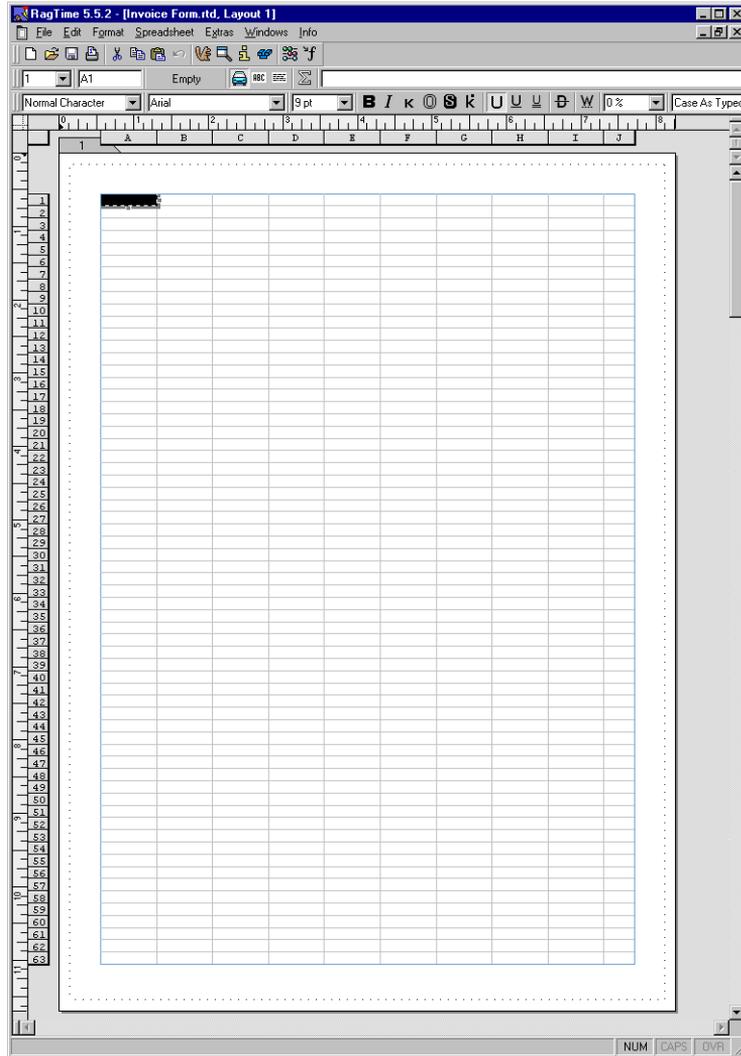
Payments	Subtotal	\$1,078.75
Mail to General Office Supply, Inc. 1906 Ocean Avenue San Francisco, CA 94127	Wire to First National Bank 23 Market Street San Francisco, CA 94234 Account Number 121212.343434	Discount (5%)
		\$53.94
		Net
		\$1,024.81
		Tax
		\$128.10
		Total Due
		\$1,152.91

Simple logo using graphic text

The entire invoice is created in the spreadsheet.

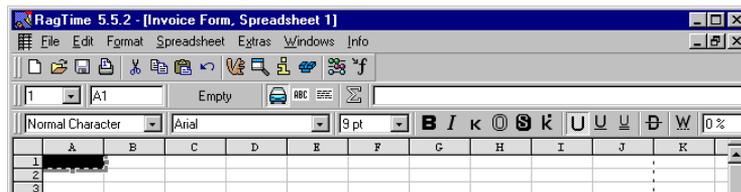
Calculation with simple formula

2. Draw a rectangle preset with the SPREADSHEET content type that approximately fills the printable area of the page. After clicking in cell A1, you should see something like this on the screen:



Because the following steps all are performed on the spreadsheet, it is more comfortable to work on the spreadsheet in its own window.

3. CHOOSE WINDOWS → OPEN COMPONENT or apply the OPEN COMPONENT WINDOW tool. The spreadsheet appears in its own window.



The title bar of a RagTime 5 window always describes what is displayed in the window when in MAXIMIZE mode. The first part of a title is always the document name as it appears in the Windows OS. The second part is the name of the displayed component.

B / A You can also click OPEN COMPONENT to display the current component in MAXIMIZE mode.

When spreadsheet components are displayed in their own windows, dashed lines show how much of the spreadsheet appears on a page when printed. When printing, RagTime tries to print the contents of a single cell entirely on one page. When a layout containing a spreadsheet is printed, the page division of the layout is used.

B / A The spreadsheet layout often harmonizes better with the paper size when in landscape mode. If necessary, switch the paper orientation by choosing **FILE** → **PAGE SETUP...**

A RagTime displays the **TYPOGRAPHY** palette “docked” underneath the other tool bars.

If you would like to position the **TYPOGRAPHY** palette somewhere else as shown in the adjacent illustration, grab the double-bar handle on the left and drag the palette to your desired location.

You can also use a formula to calculate the invoice date in cell **F20** either by choosing **EDIT** → **INSERT SPECIAL TEXT** → **DOCUMENTDATE (SHORT)** or by entering a formula. The **DOCUMENTDATE** function (see exercise 5) is particularly well-suited for stationery pads.

You can use the command **FORMAT** → **VALUE FORMAT** → ... to set the value format for displaying cell contents.

Choosing **WINDOWS** → **AUXILIARIES** → **VALUE FORMATS** opens a window that allows you to analyze and edit existing and create new value formats. If you change the definition of a value format here, the change will automatically be applied whenever the format is used. We recommend you experiment with the formats and refer to the on-screen documentation for details. We will address value formats in more depth later on.

Formatting the Headings

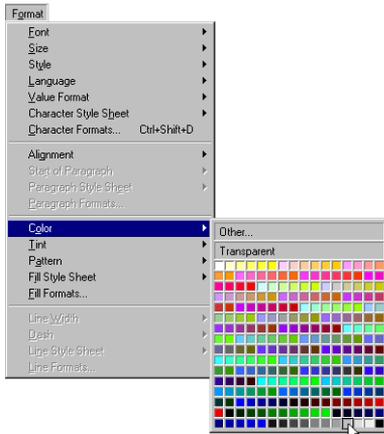
8. Align the contents of cells in rows 16 through 21 as shown in the following illustration by choosing **FORMAT** → **ALIGNMENT** → **CENTERED** / **RIGHT**.

14	Invoice					
15	Please refer to your invoice number, account number and date in all communications.					
16				Account Number	12345	
17				Invoice Number	9876	
18				Shipping Date	10/23/00	
19				Due Date	11/23/00	
20						
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
22						

We want to emphasize the headings in row 23 by making them bold and colored.

9. Select row 23 by clicking the row header.
10. Click the **BOLD** button in the **TYPOGRAPHY** palette or choose **FORMAT** → **STYLE** → **BOLD**.

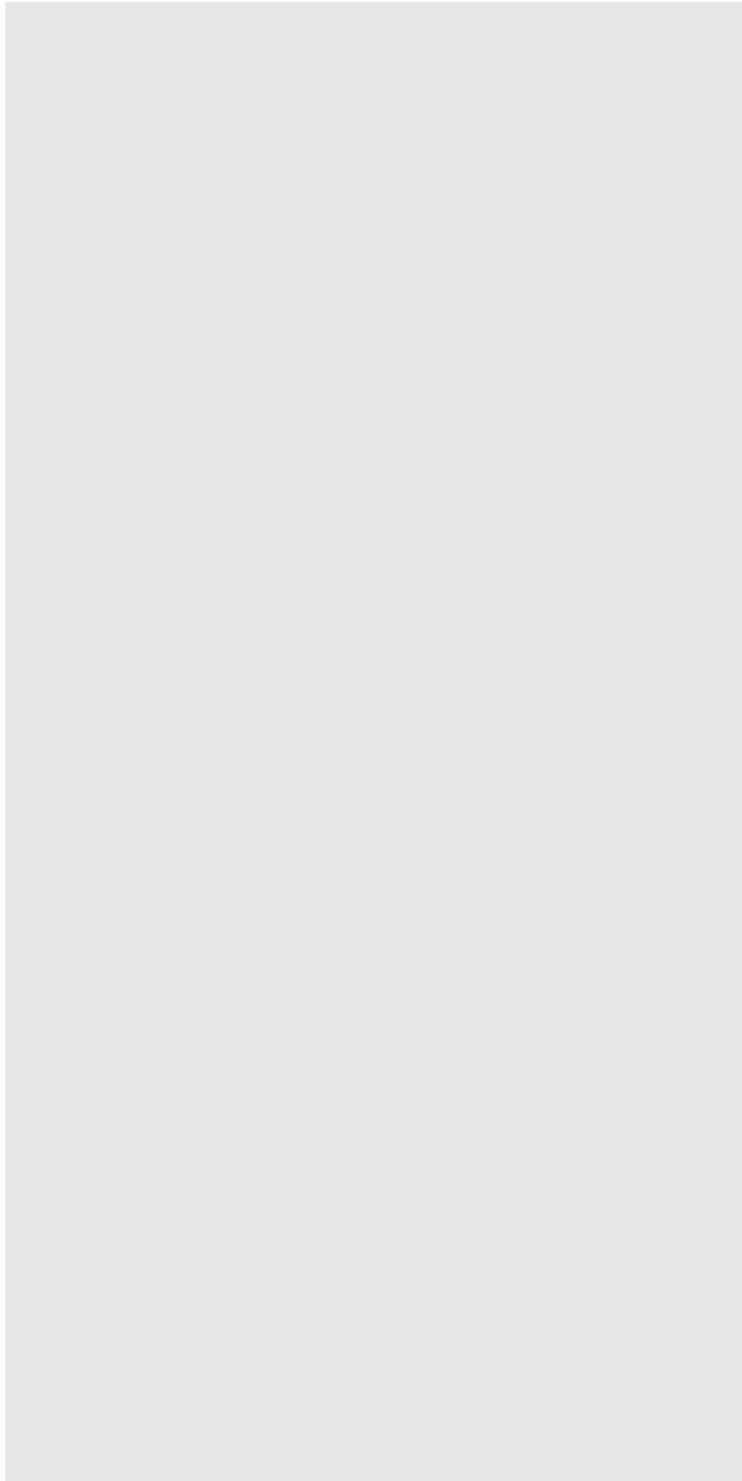
14	Invoice					
15	Please refer to your invoice number, account number and date in all communications.					
16				Account Number	12345	
17				Invoice Number	9876	
18				Shipping Date	10/23/00	
19				Due Date	11/23/00	
20						
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						



11. Choose **FORMAT** → **COLOR** → **(GRAY)**.

The result should look something like this:

14	Invoice					
15	Please refer to your invoice number, account number and date in all communications.					
16				Account Number	12345	
17				Invoice Number	9876	
18				Shipping Date	10/23/00	
19				Due Date	11/23/00	
20						
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
22						



Entering and Formatting Invoice Items

12. Write the first invoice item in row 22.

14	Invoice					
15						
16				Account Number	12345	
17				Invoice Number	9876	
18				Shipping Date	10/23/00	
19				Due Date	11/23/00	
20						
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
22	10	10	87688	glue sticks	0.85	
23						

13. Center the contents of cells A22 through C22 with **FORMAT → ALIGNMENT → CENTERED**.

14	Invoice					
15						
16				Account Number	12345	
17				Invoice Number	9876	
18				Shipping Date	10/23/00	
19				Due Date	11/23/00	
20						
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
22	10	10	87688	glue sticks	0.85	
23						

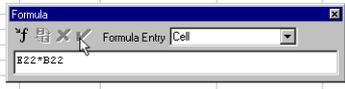
Calculating Extended Amounts

14. Select cell F22.

15. Open the **FORMULA** palette by clicking the **ABACUS** in the tool bar and click in the entry field of the palette to start entering the formula.

16. To enter the formula **Shipped * Unit Price**, click cell B22, type an asterisk (*), and click cell E22. Complete the formula by pressing **ENTER** or “check it off.”

20						
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
22	10	10	87688	glue sticks	0.85	8.5
23						
24						
25						
26						
27						
28						



17. Enter additional invoice items according to the following example, widening columns when necessary.

20						
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
22	10	10	87688	glue sticks	0.85	8.5
23	40	40	44459	erasers	1.15	
24	15	15	66164	pencils 100 pack	24.5	
25	30	30	63868	lined pads	2.5	
26	25	25	42561	paper clips 100 pack	7.85	
27	10	10	95241	desk sets	18.65	
28	20	20	68384	3.5 in disks 10 pack	9.95	
29						

18. To center align the values in cells A23 to C50, select the range by clicking in cell A25 and, while holding down the mouse button, dragging the pointer to cell C50.

B / A RagTime automatically recognizes a slew of value formats. You can test this by typing "\$0.85" in cell E24. RagTime interprets this as the numeric value 0.85 connected to the dollar currency format, as shown in the menu bar. The entry is displayed with this link in layout mode.

A Formulas not only calculate all sorts of values, but handle text operations as well. Let's set up the following scenario: The customer discount is to be stricken for advertising purposes. The customer's discount rate is extracted from a mail-merge file and entered into the non-printing cell D19.

Several solutions are conceivable. They are listed below, beginning with the easiest. Try them out and experiment with your own changes! The text is to appear in cell A58. If you lighten the font color by choosing `FORMAT → TINT → 60%`, the invoice form demands less obtrusive advertising.

Place the pointer in cell A58, click the ABACUS, and enlarge the FORMULA palette a little before getting to work in it.

Please note that quotation marks must be entered as well!

→ Simple link, albeit still including a rounding error:

Formula: "A customer discount of \$ " & Text(F52) & " has been granted!"

→ Simple link, value format \$ with two decimal places:

Formula: "A customer discount of " & Text(F52;value format("Dollar")) & " has been granted!"

→ The fields containing the applicable discount rate (D19) and the final amount (F51) have been selected as reference quantities:

Formula: "A customer discount of " & Text(D19*F51/100) & " \$ has been granted!"

→ Output only if the customer discount rate is greater than zero:

Formula: If(D19 > 0;"A customer discount of " & Text(D19*F51/100) & " \$ has been granted!";)

There is an empty operating instruction behind the last semicolon, which is carried out (but has no effect!), if the expression `D19 > 0` is false. To finish up, reduce the font's tint by choosing `FORMAT → TINT → 60%`, as recommended above.

	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
20						
21	10	10	87688	glue sticks	0.85	8.5
22	40	40	44458	erasers	1.15	
23	15	15	66164	pencils 100 pack	24.5	
24	30	30	63868	lined pads	2.5	
25	25	25	42561	paper clips 100 pack	7.85	
26	10	10	95241	desk sets	18.65	
27	20	20	68384	3.5 in disks 10 pack	9.95	
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						

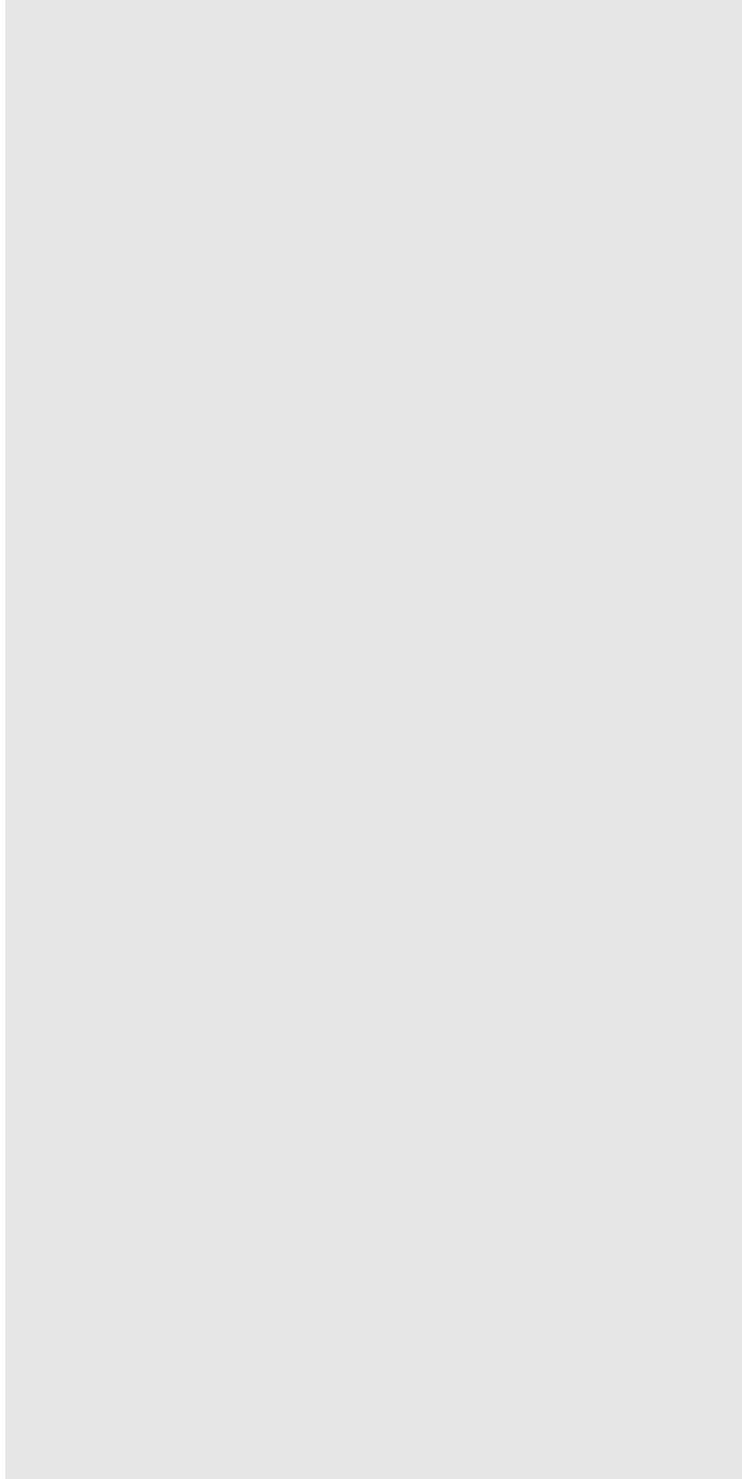
19. Center the contents of cells A23 through C50.
20. Select cell E22 through F50 in the same way.
21. Give the cells the value format for dollars by choosing **FORMAT** → **VALUE FORMAT** → **\$**. Compare the illustration below with your results.

	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
20						
21	10	10	87688	glue sticks	\$0.85	\$8.50
22	40	40	44458	erasers	\$1.15	\$46.00
23	15	15	66164	pencils 100 pack	\$24.50	\$367.50
24	30	30	63868	lined pads	\$2.50	\$75.00
25	25	25	42561	paper clips 100 pack	\$7.85	\$196.25
26	10	10	95241	desk sets	\$18.65	\$186.50
27	20	20	68384	3.5 in disks 10 pack	\$9.95	\$199.00
28						\$0.00
29						\$0.00
30						\$0.00
31						\$0.00
32						\$0.00
33						\$0.00
34						\$0.00
35						\$0.00
36						\$0.00
37						\$0.00
38						\$0.00
39						\$0.00
40						\$0.00
41						\$0.00
42						\$0.00
43						\$0.00
44						\$0.00
45						\$0.00
46						\$0.00
47						\$0.00
48						\$0.00
49						\$0.00
50						\$0.00
51						\$0.00

Copying Formulas

As you saw in exercise 3, you don't have to enter the formula in F22 for calculating the extended amount separately in each cell. You can copy it into the following cells.

22. Select cell F22 (containing the formula for calculating the extended amount of item 1).
23. Choose the command **EDIT** → **COPY** from the menu bar.
24. Select cells F23 through F50.



25. Choose EDIT→PASTE from the menu bar. The result should look like this:

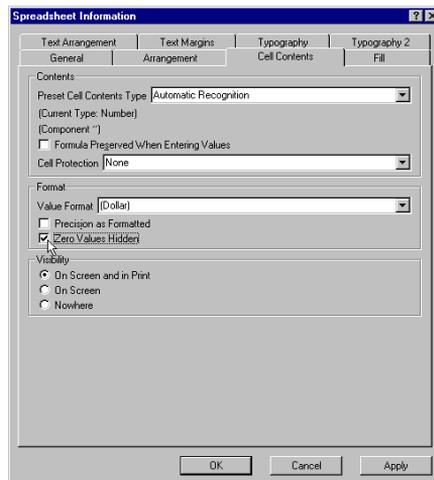
	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
20						
21	10	10	87688	glue sticks	\$0.85	\$8.50
22	40	40	44458	erasers	\$1.15	\$46.00
23	15	15	66164	pencils 100 pack	\$24.50	\$367.50
24	30	30	63868	lined pads	\$2.50	\$75.00
25	25	25	42561	paper clips 100 pack	\$7.85	\$196.25
26	10	10	95241	desk sets	\$18.65	\$186.50
27	20	20	68384	3.5 in disks 10 pack	\$9.95	\$199.00
28						\$0.00
29						\$0.00
30						\$0.00
31						\$0.00
32						\$0.00
33						\$0.00
34						\$0.00
35						\$0.00
36						\$0.00
37						\$0.00
38						\$0.00
39						\$0.00
40						\$0.00
41						\$0.00
42						\$0.00
43						\$0.00
44						\$0.00
45						\$0.00
46						\$0.00
47						\$0.00
48						\$0.00
49						\$0.00
50						\$0.00
51						\$0.00

Hiding Zeros

Zeros appear in some cells because no unit prices or shipped quantities have been entered in the corresponding lines. How to hide these zeros is described in the following steps.

26. Select the corresponding range in column F and make sure it remains highlighted. Choose SPREADSHEET→GET INFO from the menu bar. The SPREADSHEET INFORMATION dialog appears.

27. Select the panel CELL CONTENTS.



28. Check ZERO VALUES HIDDEN and confirm the change with OK. The change appears immediately:

A Formulas can be copied quickly by using the fill-in feature. Or, you may prefer the following option to the procedure described to the left.

1. Select cell F24 (containing the formula for calculating the extended amount of item 1).

20							
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount	
22	10	10	87688	glue sticks	\$0.85	\$8.50	
23	40	40	44458	erasers	\$1.15		
24	15	15	66164	pencils 100 pack	\$24.50		
25	30	30	63868	lined pads	\$2.50		
26	25	25	42561	paper clips 100 pack	\$7.85		
27	10	10	95241	desk sets	\$18.65		
28	20	20	68384	3.5 in disks 10 pack	\$9.95		
29							

2. Drag the cell's bottom handle to cell F30.

20							
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount	
22	10	10	87688	glue sticks	\$0.85	\$8.50	
23	40	40	44458	erasers	\$1.15		
24	15	15	66164	pencils 100 pack	\$24.50		
25	30	30	63868	lined pads	\$2.50		
26	25	25	42561	paper clips 100 pack	\$7.85		
27	10	10	95241	desk sets	\$18.65		
28	20	20	68384	3.5 in disks 10 pack	\$9.95		
29							

RagTime copies the formula together with cell F24's fixed value format to the selected cells and generates the desired results. (When in doubt, you can verify the formula in the formula palette.)

20							
21	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount	
22	10	10	87688	glue sticks	\$0.85	\$8.50	
23	40	40	44458	erasers	\$1.15	\$46.00	
24	15	15	66164	pencils 100 pack	\$24.50	\$367.50	
25	30	30	63868	lined pads	\$2.50	\$75.00	
26	25	25	42561	paper clips 100 pack	\$7.85	\$196.25	
27	10	10	95241	desk sets	\$18.65	\$186.50	
28	20	20	68384	3.5 in disks 10 pack	\$9.95	\$199.00	
29							

20	Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
21	10	10	87688	glue sticks	\$0.85	\$8.50
22	40	40	44458	erasers	\$1.15	\$46.00
23	15	15	66164	pencils 100 pack	\$24.50	\$367.50
24	30	30	63868	lined pads	\$2.50	\$75.00
25	25	25	42561	paper clips 100 pack	\$7.85	\$196.25
26	10	10	95241	desk sets	\$18.65	\$186.50
27	20	20	68384	3.5 in disks 10 pack	\$9.95	\$199.00
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						

The Lower Portion of the Invoice

29. Enter the necessary texts and numbers, according to the following example, at the bottom of the invoice.

50						
51		Payments			Subtotal	
52	Mail to		Wire to		Discount (5%)	
53	General Office Supply, Inc.		First National Bank		Net	
54	1906 Ocean Avenue		23 Market Street		Tax	
55	San Francisco, CA 94127		San Francisco, CA 94234		Total Due	
56			Account Number 121212 343434			
57						

Cell F51 should contain the sum of the extended prices in column F.

30. Select cell F51 and click the FUNCTIONS icon in the tool bar.
31. Select the function Sum in the dialog box which opens and click INSERT. The FORMULA palette opens, displaying the Sum function. The insertion marker blinks between the parentheses.
32. Drag across cells F49 : F22. RagTime sets the addresses between the parentheses of the function.
33. Press ENTER or “check off” the formula in the palette.

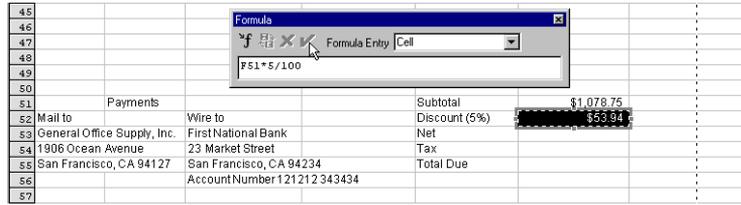
44						
45						
46						
47						
48						
49						
50						
51		Payments			Subtotal	\$1,078.75
52	Mail to		Wire to		Discount (5%)	
53	General Office Supply, Inc.		First National Bank		Net	
54	1906 Ocean Avenue		23 Market Street		Tax	
55	San Francisco, CA 94127		San Francisco, CA 94234		Total Due	
56			Account Number 121212 343434			
57						

34. The next formula calculates the discount (in this example, 5.0 %). Select cell F52.

If you want to specify fixed deadlines from the date of the invoice in cell F18 to the payment due date in cells F19, it makes sense to calculate the latter using formulas, especially when working in forms. For example, you can enter the formula `F18 + 10` in cell F19. RagTime then enters dates of 10 days after the invoice date.

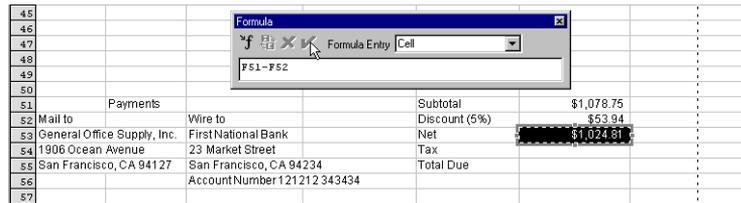
As usual, you can set the date format under `FORMAT` → `VALUE`
`FORMAT` → `...`

35. Click in the FORMULA palette and enter the formula shown in the illustration below.



36. The next formula calculates the net amount. Select cell F53.

37. Click in the FORMULA palette and enter the formula shown in the illustration below.



38. Create formulas for cells F54 and F55 in the corresponding way.

39. The formatting still needs to be done. Select cells F51 : F55 and choose FORMAT → VALUE FORMAT → \$.

40. Set the style of cells to bold according to the example.

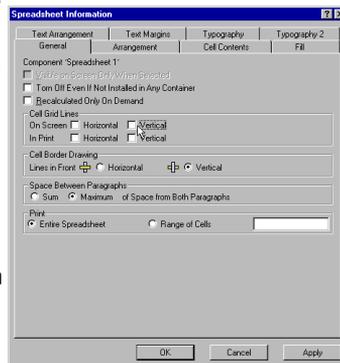
50		Payments		Subtotal	\$1,078.75
51	Mail to	Wire to		Discount (5%)	\$53.94
52	General Office Supply, Inc.	First National Bank		Net	\$1,024.81
53	1906 Ocean Avenue	23 Market Street		Tax	\$128.10
54	San Francisco, CA 94127	San Francisco, CA 94234		Total Due	\$1,152.91
55		Account Number 121212 343434			
56					
57					

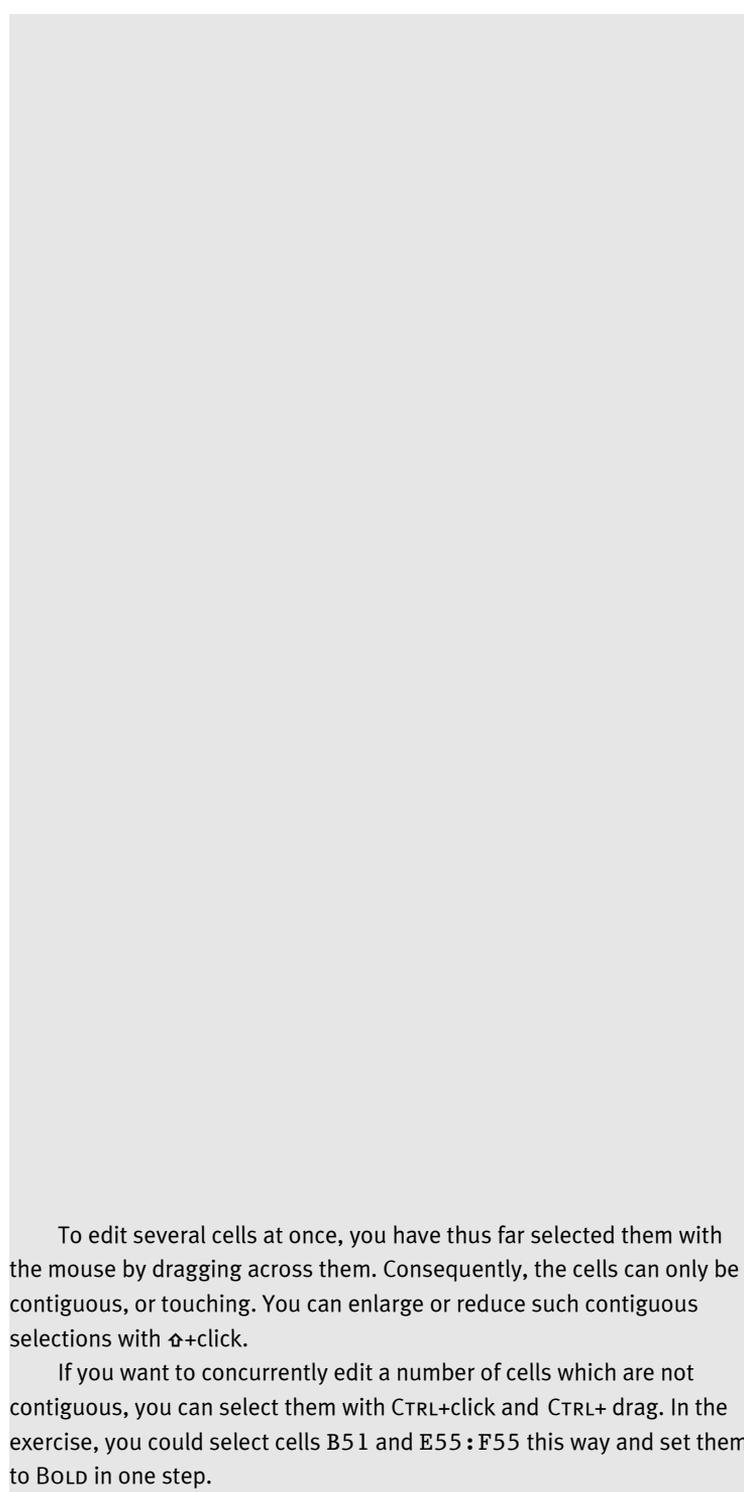
Settings for the Cell Grid Lines and Cell Borders

The cell grid lines are mainly for orientation on the screen and are normally not printed. As you saw in the example at the beginning of this exercise, the invoice is divided not with the grid, but with individual, strategically placed lines.

41. To turn off the grid lines, choose SPREADSHEET → GET INFO.

42. Select the panel GENERAL and turn off the check box for CELL GRID LINES. Confirm the change by clicking OK.





To edit several cells at once, you have thus far selected them with the mouse by dragging across them. Consequently, the cells can only be contiguous, or touching. You can enlarge or reduce such contiguous selections with **⇧+click**.

If you want to concurrently edit a number of cells which are not contiguous, you can select them with **CTRL+click** and **CTRL+ drag**. In the exercise, you could select cells **B5:1** and **E55:F55** this way and set them to **BOLD** in one step.

The work with the spreadsheet is complete. Further design is simpler to conduct in the layout, which gives you a better general impression of your document. To close the spreadsheet window, choose **FILE** → **CLOSE**. The layout of the invoice looks approximately like this:

General Office Supply, Inc.					
1906 Ocean Avenue San Francisco, CA 94127					
House of Lamps 106 Grant Street San Francisco, CA 94127					
Invoice					
				Account Number	12345
				Invoice Number	9876
				Shipping Date	10/23/00
				Due Date	11/23/00
Ordered	Shipped	Item Number	Description	Unit Price	Extended Amount
10	10	87688	glue sticks	\$0.85	\$8.50
40	40	44458	erasers	\$1.15	\$46.00
15	15	66164	pencils 100 pack	\$24.50	\$367.50
30	30	63868	lined pads	\$2.50	\$75.00
25	25	42561	paper clips 100 pack	\$7.85	\$196.25
10	10	95241	desksets	\$18.65	\$186.50
20	20	68384	3.5 in disks 10 pack	\$9.95	\$199.00
				Subtotal	\$1,078.75
				Discount (5%)	\$53.94
				Net	\$1,024.81
				Tax	\$128.10
				Total Due	\$1,152.91
Payments					
Mail to	Wire to				
General Office Supply, Inc.	First National Bank				
1906 Ocean Avenue	23 Market Street				
San Francisco, CA 94127	San Francisco, CA 94234				
	Account Number 121212 343434				

43. To set a border, select the cells E16 : F18.

14	Invoice
15	
16	
17	
18	
19	
20	

Account Number	12345
Invoice Number	9876
Shipping Date	10/23/00
Due Date	11/23/00

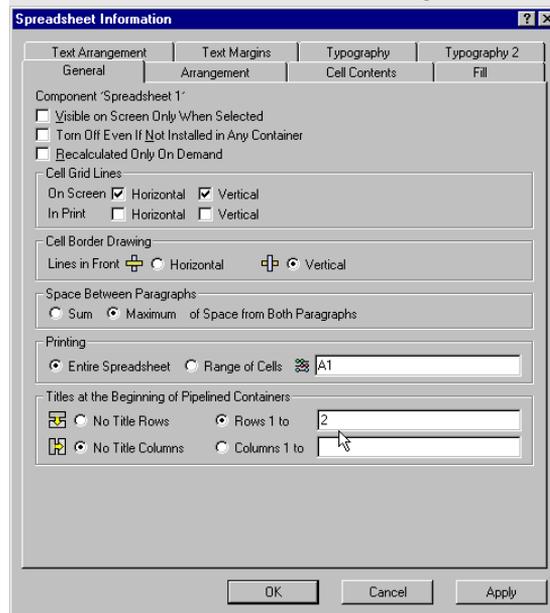
44. Select **SPREADSHEET** → **BORDERS** and the following dialog box appears.

A If you're thinking of using the preceding invoice as a multi-page form for invoices, RagTime's TITLE Row function is just what you're looking for. Title rows and title columns are inserted at the beginning of all spreadsheets that are linked through pipelines. In our example, the TITLE ROWS ensure that the company's logo appears in the first two rows of each page of the invoice. There are two ways to obtain title rows and title columns:

a) TITLE ROWS via the CONTEXTUAL menu:

1. Select row titles 1 and 2.
2. Define the selection as a TITLE ROW using the CONTEXTUAL menu.

b) TITLE ROWS via the INFORMATION dialog box:



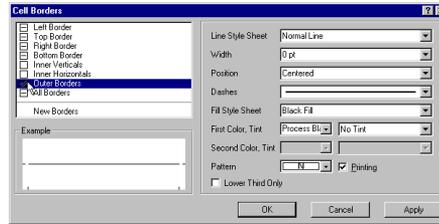
1. Click on the spreadsheet and call up the INFORMATION dialog box.

2. As shown here, define the two topmost rows as TITLE ROWS in the GENERAL panel.

3. RagTime highlights the first two rows by giving the row titles a different color and design.
4. Generate a new page by choosing EXTRAS → ADD PAGE.
5. Create a spreadsheet component and connect it to the spreadsheet on page one using the PIPELINE tool. RagTime duplicates the title rows with the company logo from page 1 on page 2.
6. Continue the invoice form as appropriate using subsequent rows, including an amount carried over from page 1, etc.

If you need more than 2 pages for your invoice, you can turn to page 6 to find out how to generate a flexible document format with the help of a master layout.

You can turn borders for the selected cell on and off by clicking the corresponding check boxes. If you click a name in the list, you can edit the line style in the right part of the dialog box. The line style is illustrated under EXAMPLE.



45. Check **OUTSIDE BORDERS** and confirm your change by clicking **OK**.
You can quickly create the desired cell borders in other parts of the invoice in a similar way. If a border does not appear as you had imagined, choose **EDIT** → **UNDO** to restore the previous state.

Designing a Simple Company Logo

To conclude this exercise, you should create a simple logo for the invoice. The company initials “GOS” should appear in the upper right corner as a decoration. The drawing tool graphic text is particularly appropriate for creating such small labels.

46. Click in the layout outside the spreadsheet. The drawing tools appear in the tool bar.
47. Select the **GRAPHIC TEXT** tool and click in the layout page.
48. Type the three letters. If necessary, you can enlarge the screen display by choosing **WINDOWS** → **DISPLAY SCALE** →
49. Format the characters according to the example and press **ENTER**.



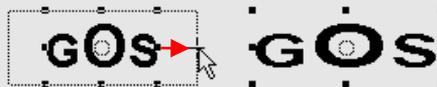
50. Move the pointer over the rotation handle in the middle of the object. The pointer changes its appearance.
51. Hold down the mouse button and drag the pointer slightly away from the middle until a ghost rectangle appears, and you can rotate the object freely.
52. Rotate the object as you wish and release the mouse button.
53. Move the logo to the suggested place in the invoice and adjust its position with the arrow keys, if necessary.



The checkboxes in the list of the CELL BORDERS dialog box turn on and off the borders of selected cells. Empty and checked boxes have the usual meaning; a dash in the checkbox means that the corresponding border is turned on in only some of the selected cells.

The line style of cell borders can be set separately for every border; therefore, you must select the borders in the list for which you want to change the settings. If you want to set the style of several borders concurrently, select the corresponding lines in the list with **⇧**+click or **CTRL**+ click.

You can further modify the logo (and of course all other drawing objects) by cropping and scaling.



To crop an object, hold down the **CTRL** key and drag the upper or lower middle handle horizontally



To scale an object, hold down the **CTRL** key while dragging a left or right middle handle. If you move the pointer past the middle of the object, it will be mirrored. Experiment with the object. In case of an “emergency,” choose **DRAWING** → **TRANSFORMATION** → **RESET TRANSFORMATION**. You can also use the other handles to crop or scale an object. Use the corresponding handles and drag as you wish.

Creating a RagTime Stationery Pad

To save the document as a RagTime stationery pad, proceed as in exercise 5. First delete the variable data from the spreadsheet so that copies you tear off from the pad are empty.

54. Select cells A8:A12 (the invoice's address field), and press the DELETE key.
55. Proceed in the same way with the invoice items in A22:E50. The extended price column F22:F50 should not be deleted because it contains formulas.
56. Likewise delete the account number, the invoice number, and the shipping and due dates in F16:F19.
57. Save the invoice as a stationery pad with FILE→SAVE AS.

There are several methods to make cells “disappear” in spreadsheets. If you use the command EDIT→CLEAR (the same as pressing the DELETE key), the values and formulas in the selected cells are deleted. Formats such as background, font and so on are preserved and used again when you enter data in the cell.

If you use SPREADSHEET→REMOVE CELLS, the complete cells, including all contents and format, are removed, and other cells are moved into their places. In a dialog box, you can specify whether the other cells should be moved from the right, below or the planes behind.

Corresponding commands are available for rows, columns and layers.

Further commands permit the insertion of cells, rows, columns and planes. Refer to the on-screen reference and experiment.

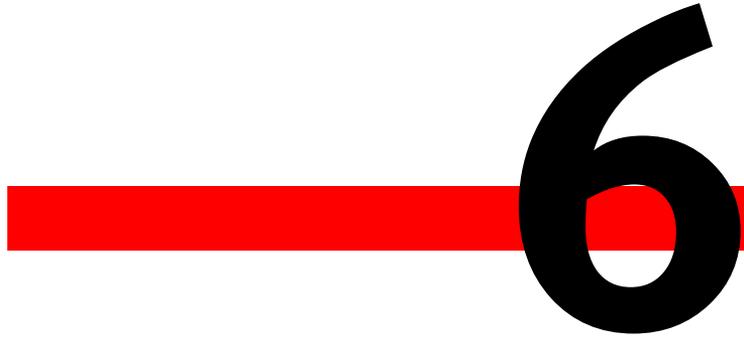
5.4 Highlights from This Chapter

General

- A RagTime stationery pad is an “electronic form pad” from which pages may be torn off as needed.
- A RagTime stationery pad may have any number of pages.
- The design and order of pages in a stationery pad is completely flexible.
- A RagTime stationery pad is created by selecting the file type “RagTime 5 Stationery Pad (*.rtt)” in the SAVE AS dialog box.
- Pipelines are connections between containers through which texts or spreadsheet contents can flow from one container to the other.
- The PIPELINE tool is located in the tool bar.

Concerning Exercises 5 and 6

- Additional layout pages are created with EXTRAS→INSERT PAGE. Documents that retain the standard rectangle automatically generate new pages as soon as text spills over.
- Pipelines may be laid between containers on the same or on different pages.
- The automatic addition of pages is controlled by pipelines and circular pipelines.
- Copies can be torn from stationery pads with a double-click on the stationery pad icon in the Windows environment or in the RagTime OPEN DOCUMENT dialog box.
- If a stationery pad is located in folder “Stationery Pads”, the name of the pad appears in the menu under FILE→NEW BEGINNING WITH→(STATIONERY PAD NAME).
- The cell grid lines in a spreadsheet may be turned on and off for screen and print in the panel SPREADSHEET→GET INFO→GENERAL.
- Cell borders may be set individually in the CELL BORDERS dialog box which you can open with SPREADSHEET→BORDERS.
- Drawing objects and their contents may be freely rotated, skewed and scaled.



6

Step Three: RagTime Professional

Creating a Master Layout  Exercise 7: Getting Your Prices in
Form—a Price List  Exercise 8: Company Training Is Necessary 
Highlights from This Chapter

6 STEP THREE: RAGTIME PROFESSIONAL

6.1 Creating a Master Layout

A layout characterizes the appearance of a document. It determines the area of a page which will be printed. Layouts may consist of many pages which all have the same structure. But they can also include pages which perform special tasks.

A document might contain

- a first page, for example, a cover page,
- left and right pages for the table of contents,
- left and right pages with regions for headers and footers,
- a page with landscape format for statistics and so on,
- left and right pages for an index,
- left and right pages for a bibliography, and
- a last page.

RagTime can produce such a document also.

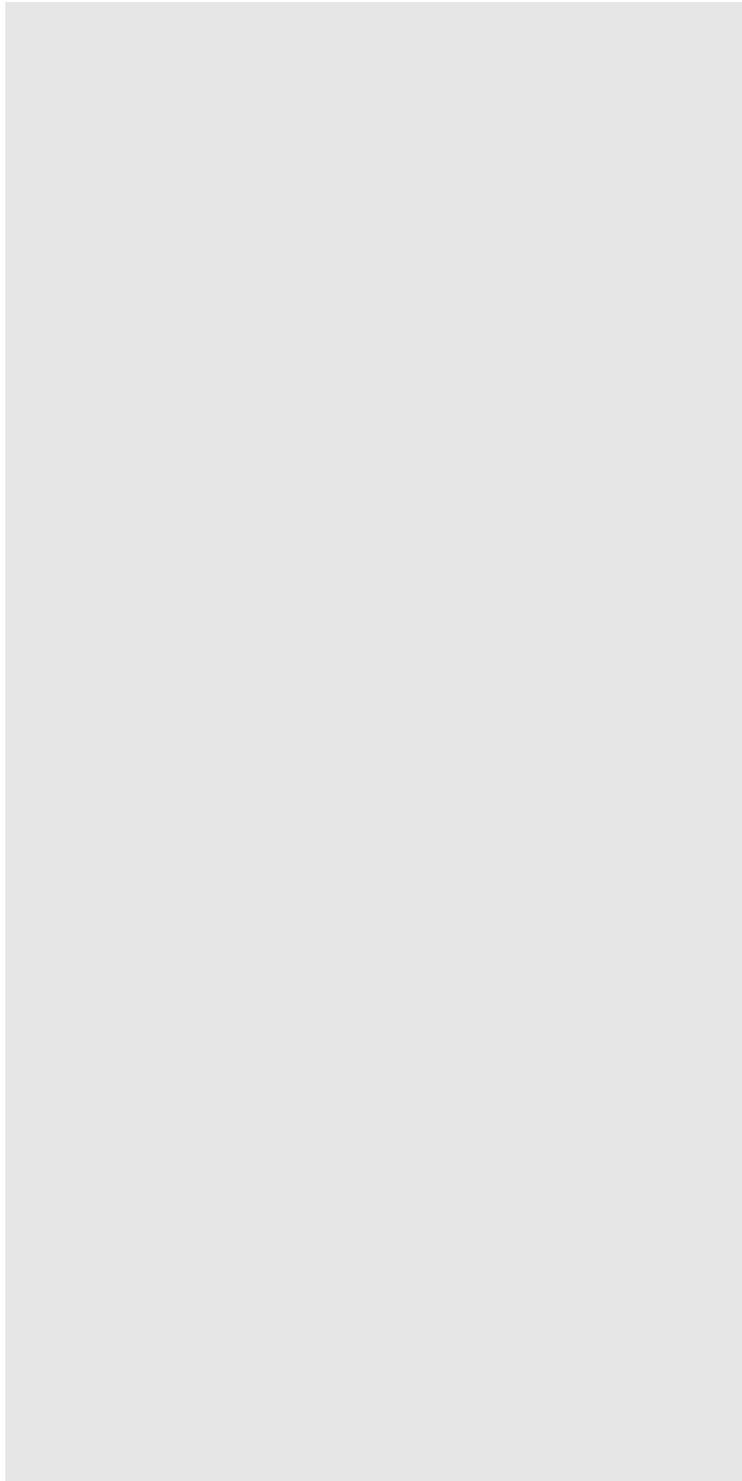
This Training Manual will not expect you to create such a complex example. But after doing the exercises in this chapter, with the aid of the on-screen documentation, you will be able to create documents of this complexity. The instrument that RagTime provides is the MASTER LAYOUT.

Before beginning the next exercise, you should have an idea what a master layout is, how it works and what it can do.

So far, we've shown you how to use circular pipelines that automatically append new pages with a customized header to accommodate text overflow when designing a RagTime stationery pad for a business letter. The circular pipeline's mechanism is ideal for use in stationery pads for such small documents that rarely consist of more than two or three different pages and are also seldom revised. At that point, we did not discuss revising documents.

Now in some cases, changes in a layout can play an important role, for example, when you have to decide on a layout in the drafting process and the final version has yet to be determined. If your layout consists of a large number of pages, you are forced to change every single page individually.

If, for example, 10, 20 or more pages are involved, of which the structure must be changed or on which an additional container must be placed, the work can be time-consuming and arduous.



RagTime's concept for master pages provides a solution to the problem. You can not only design very complex and diverse layouts with many different pages, but also modify the pages conveniently.

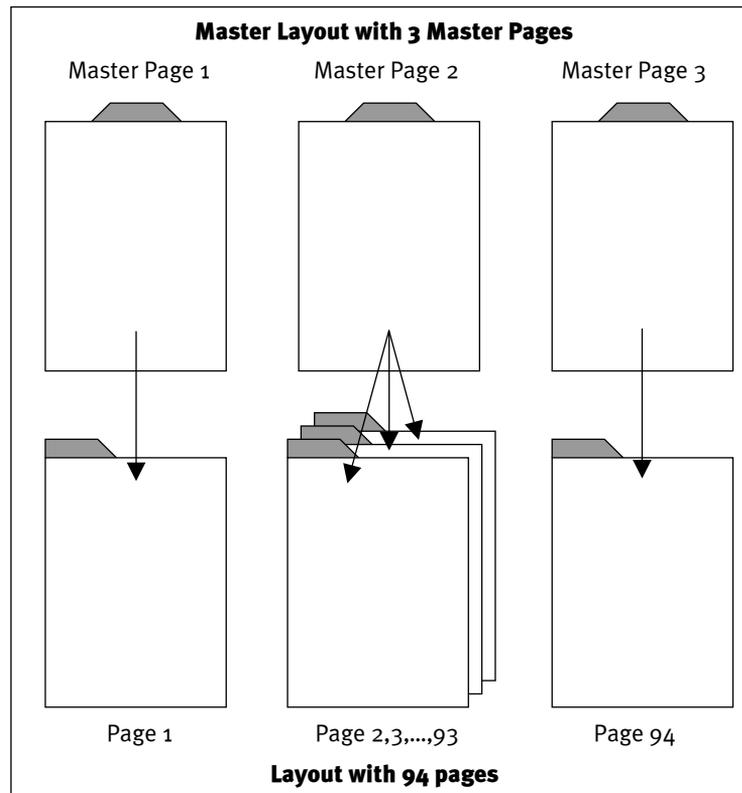
What Is a Master Layout?

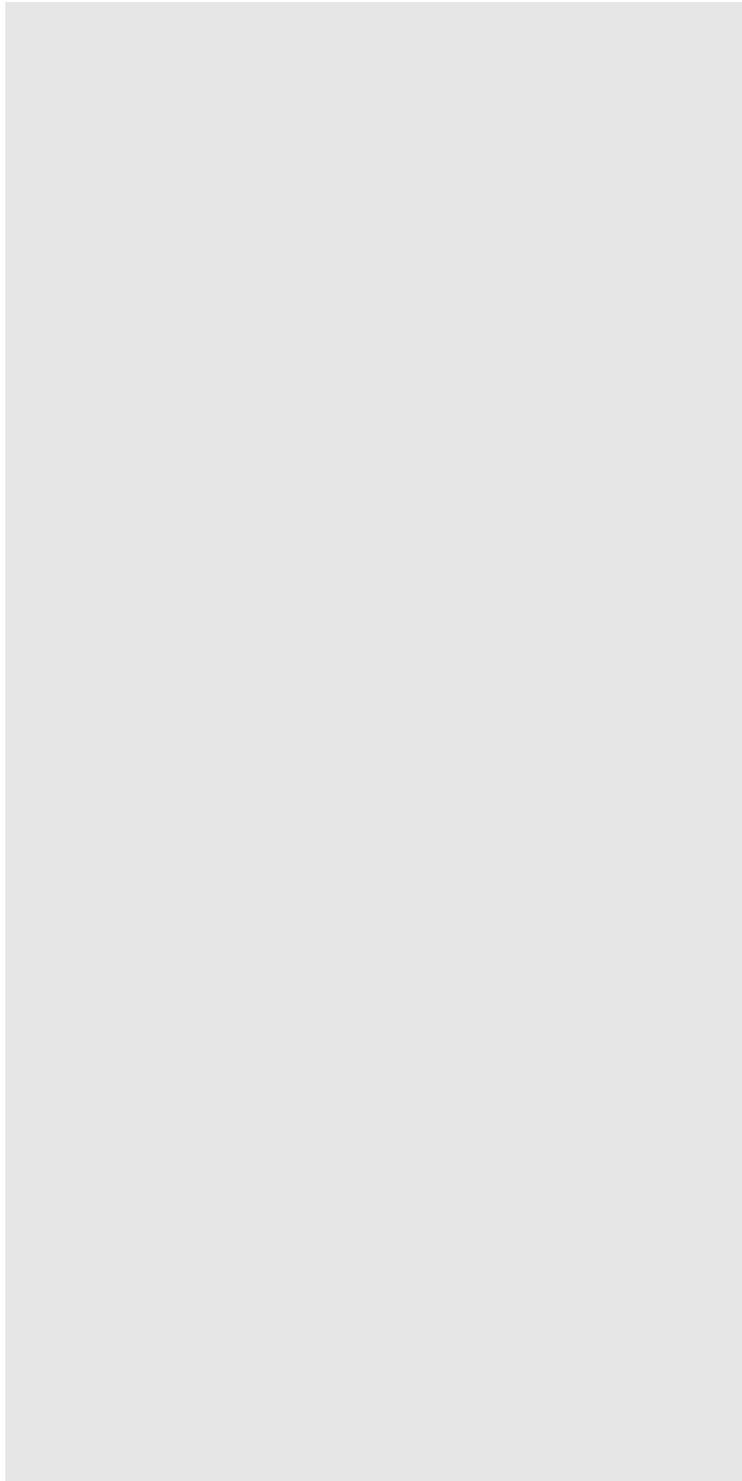
A RagTime document can be divided into three parts:

- a master layout with master pages;
- the layout pages which will eventually be printed; and
- additional components like texts, spreadsheets and so on.

A master layout consists of pages of which you determine the number and design and which are then used as "templates" for the structure of the actual pages.

Assume that you have 94 pages with text, pictures and graphs. Because the first and last pages differ from those in between, you need to design a master layout with three master pages. They will be used for the cover page, the body pages and the back page:





RagTime should then use the first master page for the first page of your layout, the second master page for the next 92 pages and the third master page for the last page.

This basic idea of master pages can be applied to the complex example described at the beginning of this chapter as well.

This feature alone represents an advance over the simple RagTime document with a circular pipeline. Pages were added as needed, but changes were troublesome.

Master layouts show their strength in such situations. Let's look at two examples.

Changes in the Design Stage

Assume that you have everything finished. Texts, pictures and graphs are okay. Now you can relax. What you could still use, though, is a wider margin for proofreader's notes.

You can easily make this change by altering just the second page of the master layout. You reduce the text container to create space for handwritten notes in the right margin.

The result is that all the pages in the layout are changed accordingly. Since additional pages are now required for the text, not only are they inserted, but the previous page 94, the last page, is moved to the end. When everything is done, you can set the correct margin in the master layout again.

Changing Existing Layouts

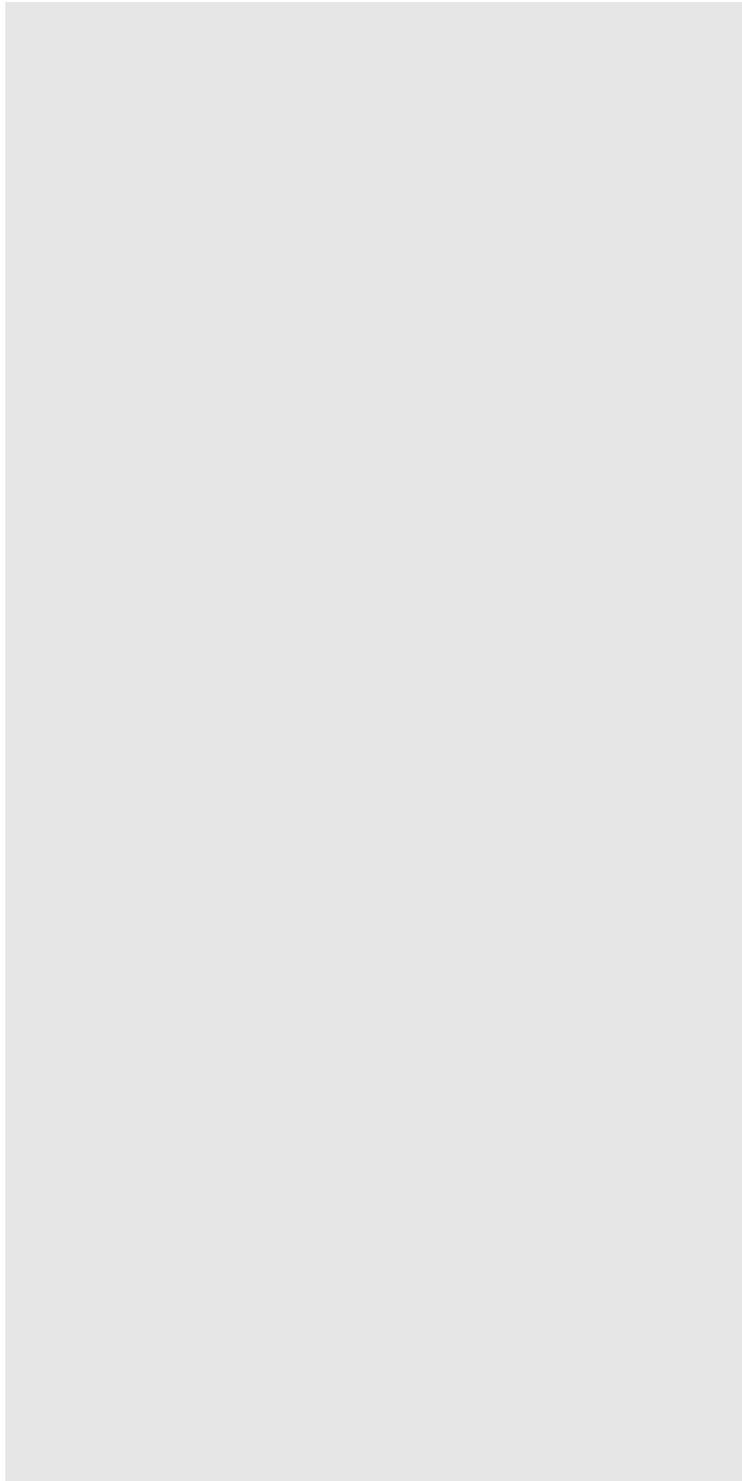
Assume that you have been using a master layout for some time now as a template for technical documentation or for teaching material used in a company training program. These documents must be brought up to date from time to time. New material may need to be produced, or the old material may need to be printed in a new form.

As in the first case, you can change the master layout. When you change any master layout page, all layout pages based on it are changed accordingly.

In the following exercises, you will have the opportunity to get to know some of the basic features of the master layout.

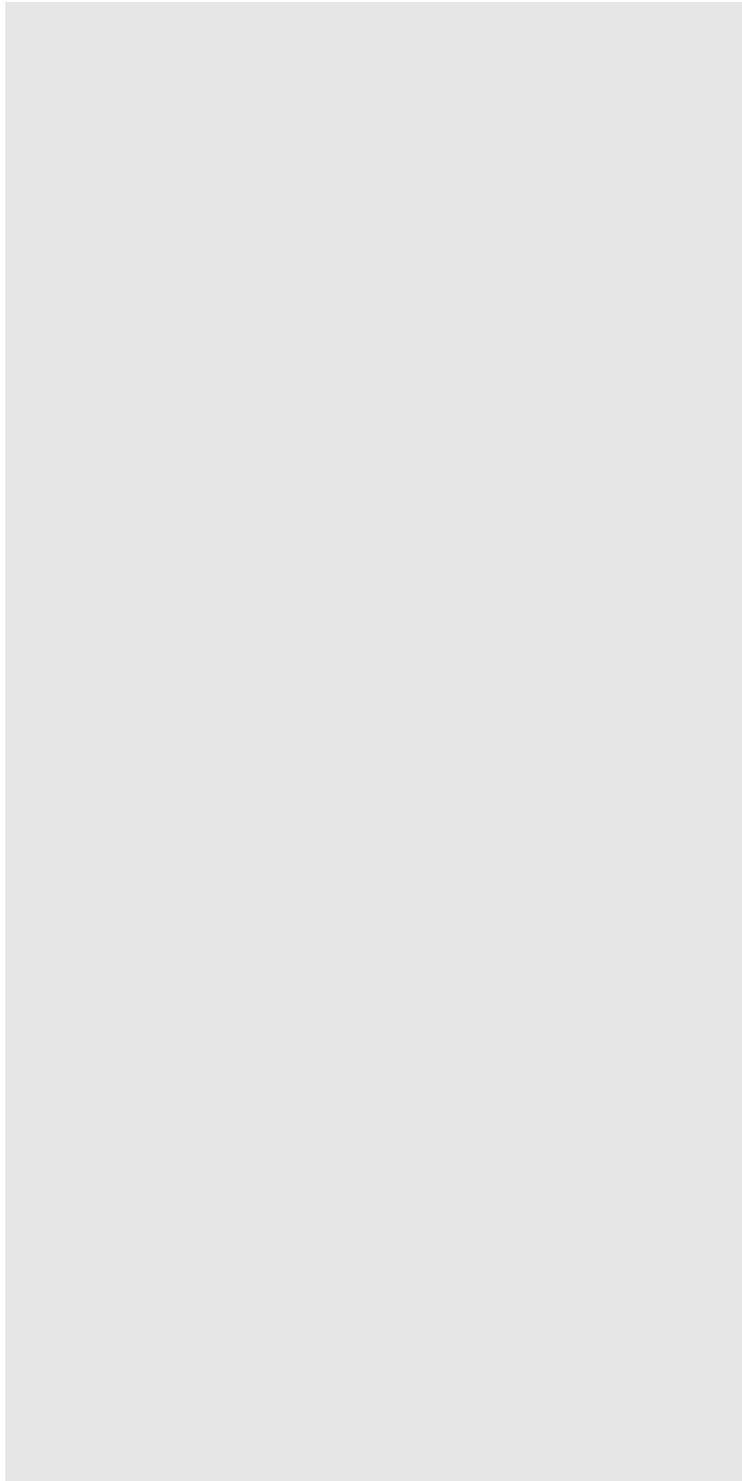
You will learn

- Goals*
- how to create a master layout,
 - what significance the master layout has for the layout,
 - how the master layout can be used for automatic page addition,
 - how to make changes in a master layout, and
 - how changes affect a layout.



The first of the two following exercises deals with a master layout consisting of two pages and a layout in which pages may be appended as needed.

The second exercise presents a somewhat more complex case and shows how changes on master pages affect layout pages.



6.2 Exercise 7: Getting Your Prices in Form—a Price List

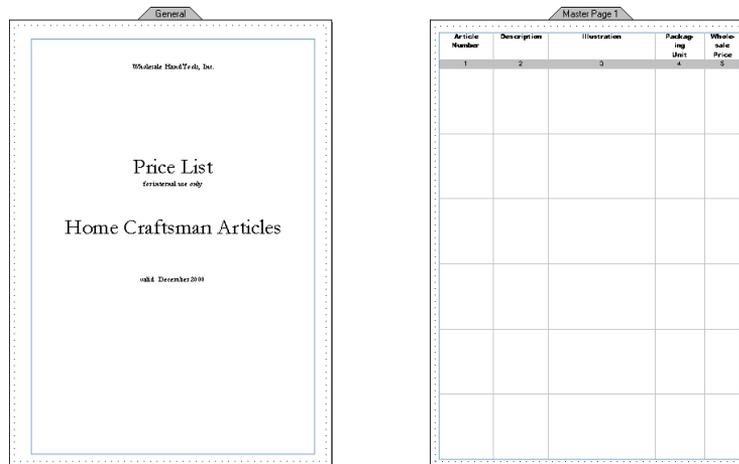
Exercise 7 uses a simply structured price list to demonstrate how a RagTime master layout works.

Goals

- In this exercise, you will learn
- how to create a master layout;
 - how to create a price list in a spreadsheet;
 - how to use spreadsheet cells as containers;
 - how to install pictures in a spreadsheet;
 - how to extend the price list with new pages; and
 - how easy it is to make changes in the price list with the aid of master pages.

The Structure of a Master Layout

The master layout consists of a cover page and a second page which functions as a template for the the actual price list.

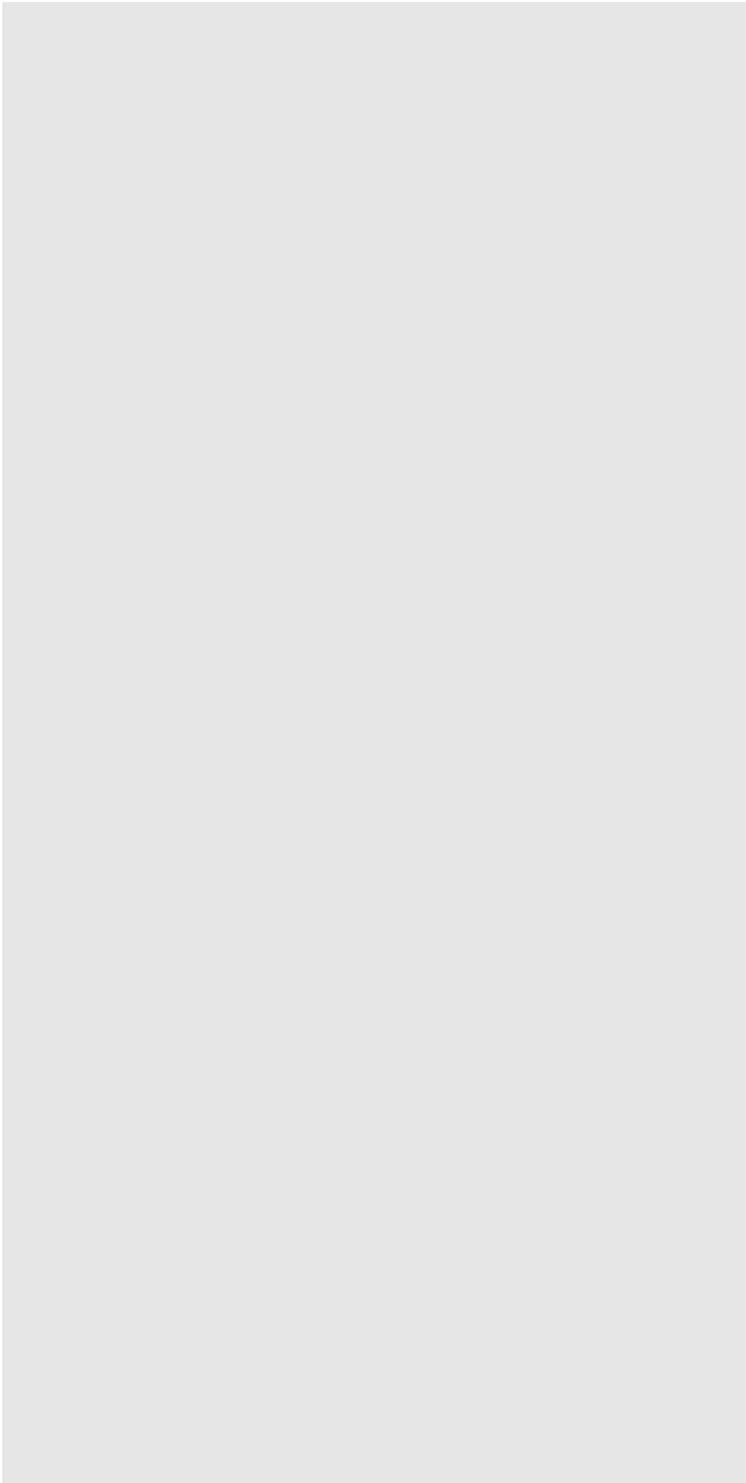


The first page contains a text; the second consists of a spreadsheet.

What is special about this spreadsheet is column C, which will demonstrate that components can be installed in cells. The cells in column C will later contain pictures.

The Steps to a Master Layout

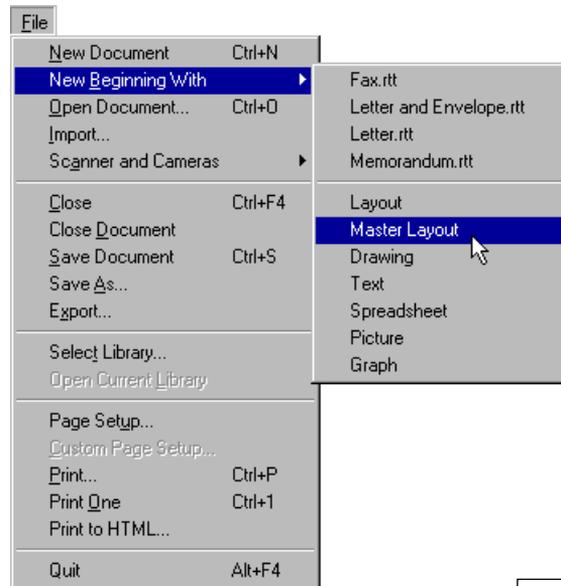
The procedure for creating and using the master layout shown above may be described in a few steps. We will treat each of the steps in the following text.



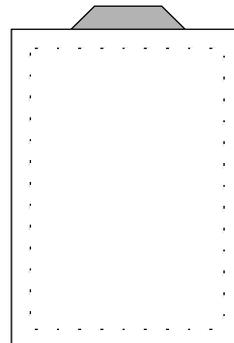
- Creating a master layout
- Adding pages
- Designing pages
- Specifying the contents types and their behavior on the derived pages.
- Specifying the use of master pages
- Creating a layout component based on a master layout

Creating a Master Layout

1. Start RagTime if necessary. Choose FILE → NEW BEGINNING WITH → MASTER LAYOUT.

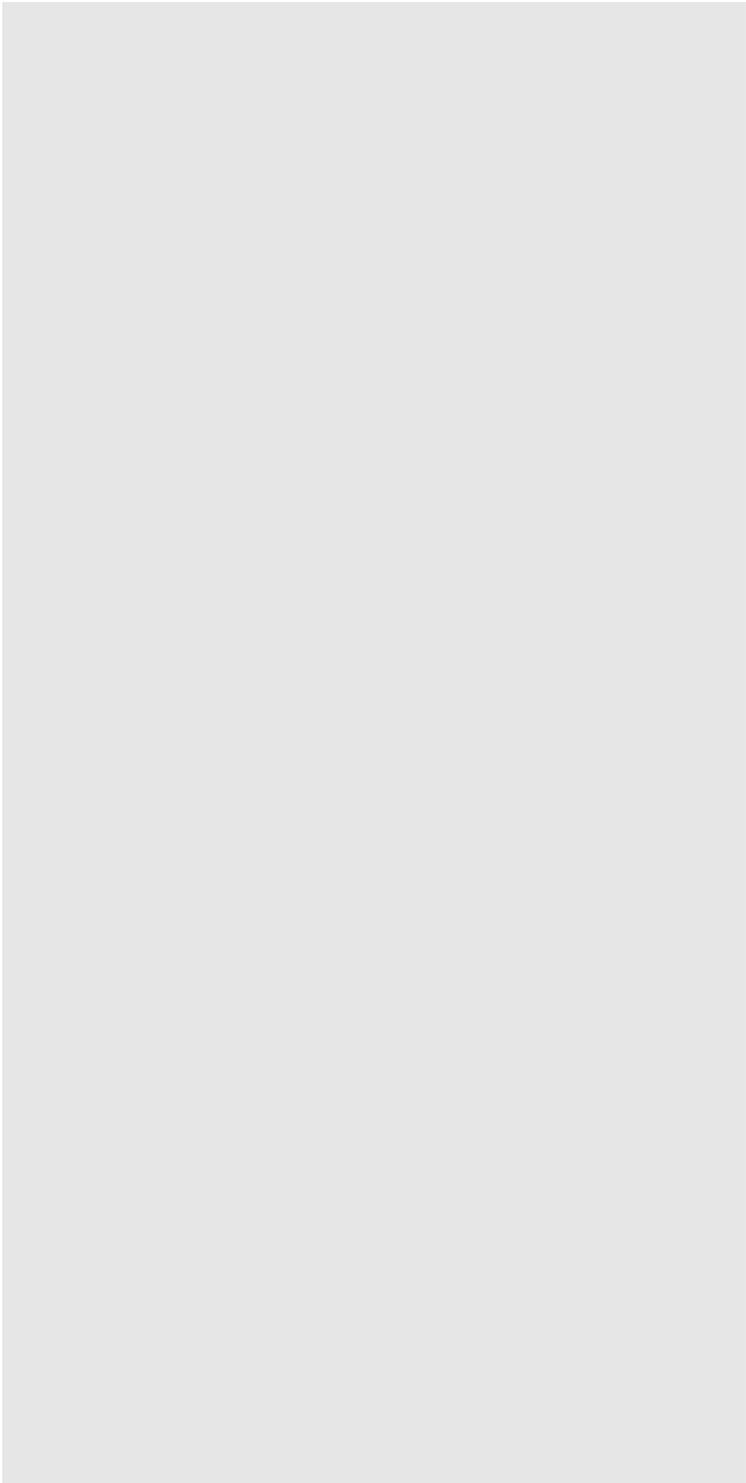


A master layout appears in a new window and the tool bar contains the layout tools. Notice that the page tag is centered over the page.



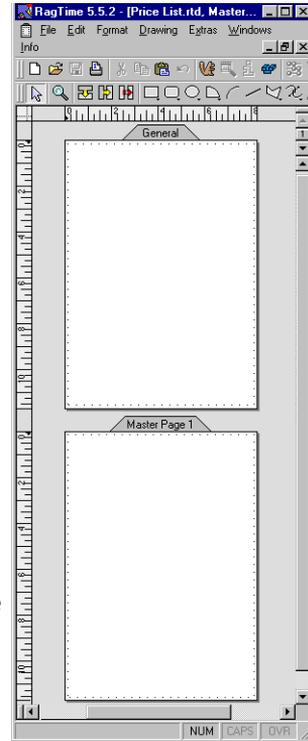
Save the document with the name “Price List” and please remember to save it regularly.

🔗 Save regularly



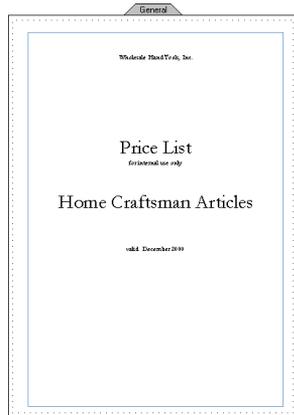
Adding a Page

2. Add a second page with the command EXTRAS→ADD PAGE. The master layout should then look like the illustration. (Reduce the screen display with the command WINDOWS→DISPLAY SCALE→... if necessary.)



Designing the Page

You have now reached the stage which is the most work in the design phase. You must decide on the form and features of the master layout so that it will later fulfill your demands. The better the master layout is adapted to the task now, the less you will have to change later.



3. Draw a rectangle on the first master page which fills the entire printable range and preset the content type to TEXT .

4. Enter the text in the illustration and format it accordingly. The text for this master page is written here because in this case, it should appear unchanged in the layout, that is, the actual price list. Changes such as the date may also be made in the master layout. However, RagTime still permits changes in the layout. However you decide, you keep your freedom to modify the design.

5. Draw a rectangle on the second master page which fills the entire printable range and preset the content type to SPREADSHEET.

6. Next design the title of the price list as in the following illustration.

If a component is displayed in a RagTime 5 window, the window's title bar consists of the document name as it appears in the Windows OS and the component name.

Windows displaying, for example, editors for style sheets, units, or rulers have no component name in the title bar.

A The date that reflects the status of the list can of course be automatically generated within a master layout as well. To generate the current date, for example, place the pointer where you would like it to appear, and choose **EDIT**→**INSERT SPECIAL TEXT**→**DATE STAMP (SHORT)**. The date functions can also be used to insert the current calendar week and other date-related information using formulas.

Article Number	Description	Illustration	Packaging Unit	Wholesale Price
1	2	3	4	5

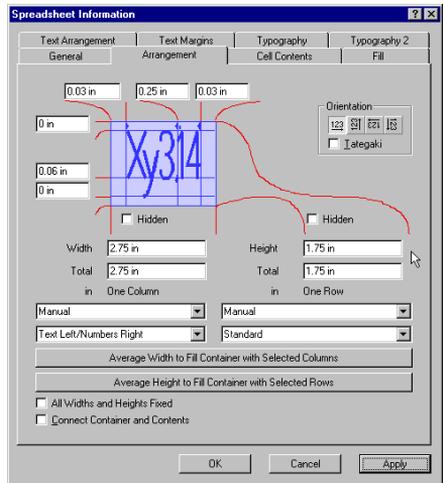
To enter the multiple-line titles of the price list, select cells A1 : E1. Click the MULTILINE TEXT button in the tool bar. You can now enter multiple lines of text in a single cell.



You will find the commands for formatting text in the FORMAT menu.

Pictures of the articles are to be later inserted in column C. To this end, you must change the width and height of the affected cells. The dimensions depend on the size of the pictures that you want to use. In this example, the dimensions should be 2.75 inches * 1.75 inches.

7. Select cell C3 and choose SPREADSHEET → GET INFO. Select the panel ARRANGEMENT and enter the width and height.



8. Confirm your changes with OK; the cell assumes the new dimensions.

Article Number	Description	Illustration	Packaging Unit	Wholesale Price
1	2	3	4	5

9. You can set the height and width of several cells at once. Select cells



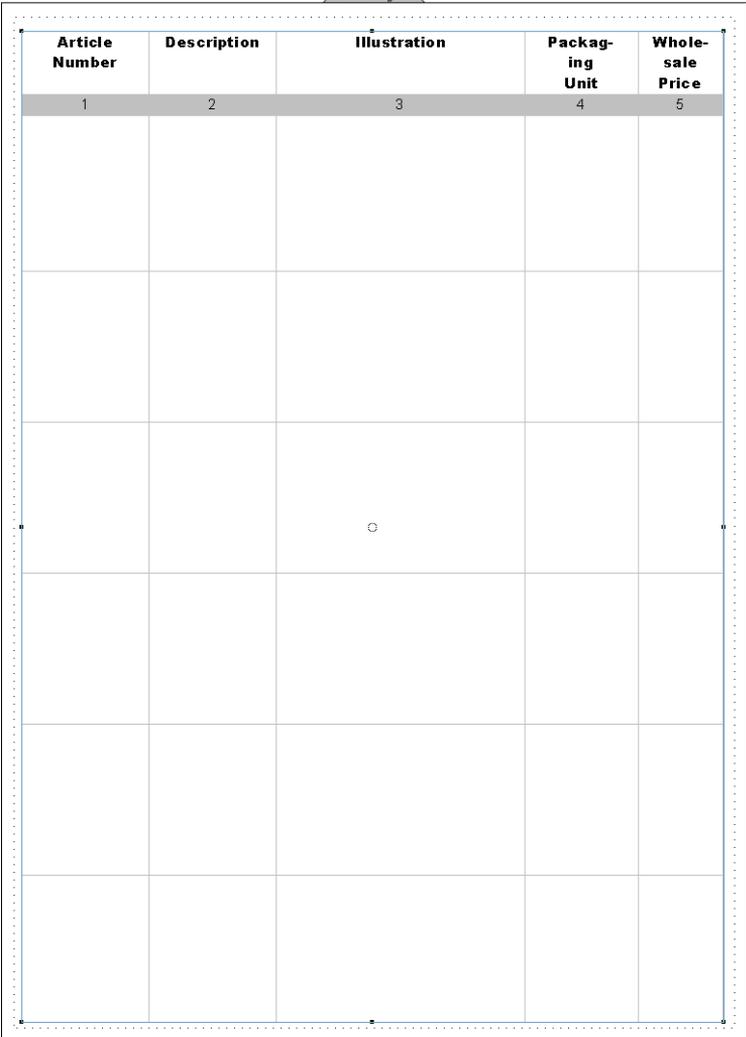
You can also open the information dialog box for the selected objects by clicking the “i” button in the tool bar.

Even if you have selected only one cell, settings for margins and cell dimensions apply to the entire column or row: width, left and right margins and the position for the decimal point apply to the entire column; height, upper and lower margins and baseline position apply to the entire row.

Orientation, alignment, and connection of contents and container apply only to the selected cells.

C4 through C7 and repeat the aforementioned steps.

10. If a few rows remain at the bottom of the spreadsheet container, reduce the size of the container by dragging the middle handle of the lower border upwards. The result should look somewhat like this:



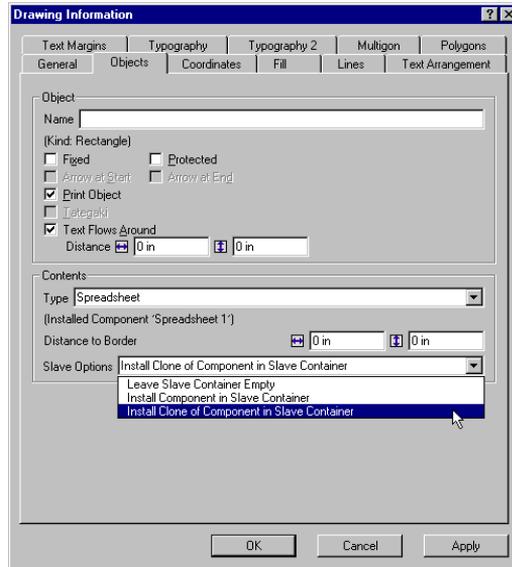
Article Number	Description	Illustration	Packaging Unit	Wholesale Price
1	2	3	4	5

The set-up and formatting are completed. All the layout pages later originating from this master page should have the same structure as this spreadsheet. The contents of the spreadsheet cells should remain editable, because you want to add various articles to the price list. You can manage this by creating duplicate spreadsheet components on the derived layout pages.

B / A There are several ways of creating cells with the same height below a list header if they don't require a specific height.

1. Highlight cells A3 through E8 in a new spreadsheet.
2. Place the pointer on the row header exactly between the separator lines of rows 8 and 9. The pointer changes in appearance.
3. Click and drag the pointer downward. As you can see, the heights of rows 3 through 8 increase at the same rate. Your screen size and display scale may require you to interrupt the procedure occasionally to scroll up the bottom part of the window.

11. Select the rectangle containing the spreadsheet and choose DRAWING → GET INFO.
12. Select the OBJECTS panel and choose the appropriate setting from the pop-up menu SLAVE OPTIONS. Confirm your change with OK.



Determining When a Master Page Is Used

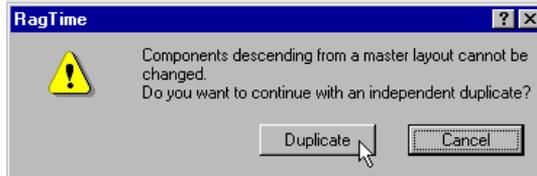
Now that you have designed both master pages, you have to assign them their places in the layout. This is quickly done in this example.

- First master page → The cover page has information about the type and creation date of the price list.
- Second master page → The pages for the price list, which follow the cover page, are all based on this page.

13. To assign the cover page its position in the document, click the page tag. The entire page is selected.



In the unusual event that, on a layout page, you have to modify a component which originates on a master page (but was not copied), you can do so without changing any settings in the master layout. When you attempt to make a change in the layout, the following warning appears and you can create a duplicate for the particular case.

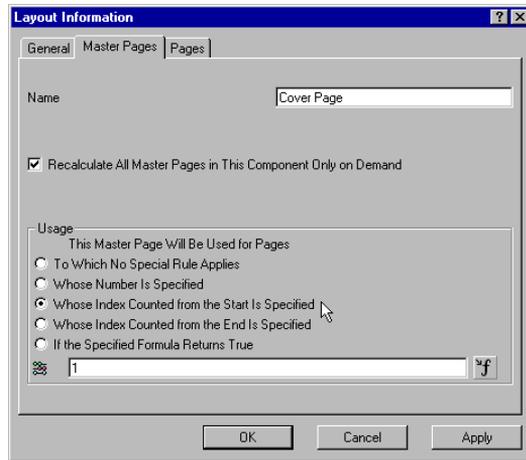


Changes which you later make in the corresponding component on the master page cannot, of course, automatically be transmitted to this layout page.

A When specifying modifications in the layout vis-à-vis the master layout, one should determine whether these changes can be applied to additional pages in the future. If so, you should modify the *master layout*.

If the envisioned changes are to be applied to more than one page, you might want to consider creating an additional page type in the master layout.

14. Now choose LAYOUT→GET INFO from the menu bar.



15. Select the panel MASTER PAGES. Name the master page “Cover Page”.

You can specify a master page for various positions in later layouts: for a particular page, as first or last page, according to a formula, or for other cases.

16. For your cover page, click WHOSE INDEX COUNTED FROM THE START IS GIVEN and, since it is to be the first page, enter “1” in the entry field. Confirm your changes with OK.

17. Select the second page by clicking the page tag.

18. Choose LAYOUT→GET INFO from the menu bar.

19. Name the second master page “Price list”.

20. It is to be used on pages TO WHICH NO SPECIAL RULE APPLIES.

Confirm your changes with OK.

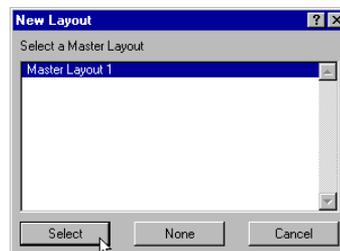
Now you have defined the structure of your future price lists in a master layout.

Creating a Layout Component Based on a Master Layout

Now you will produce the first price list.

21. Choose WINDOWS→NEW COMPONENT→LAYOUT. The NEW LAYOUT dialog box appears:

RagTime presents a list of master layouts from which you can choose one to be used for the new layout. In our example, the list contains only one master layout.

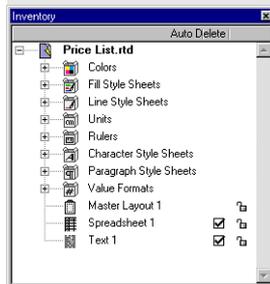


You can open the information dialog box for layouts and master layouts by double-clicking the page tag.



Your document now contains a number of components that RagTime lists in the inventory. Open it by clicking Roderick the Squirrel in the tool bar or with the command **WINDOWS**→**PALETTES**→**INVENTORY**.

If you like, you can leave it open and observe how components are added in the course of the exercise. The components are sorted alphabetically in the inventory.



If necessary, enlarge the inventory's window using the window separator to make its contents properly legible. To zoom out the inventory, click the squirrel again or click **CLOSE**.

Should you have opened several documents at the same time in RagTime, the inventory displays all of these documents' components indented underneath their respective names. You can flip these lists open and shut using common Windows procedures.

22. Click **SELECT**. The first page of a new layout component, a copy of the cover page from the master layout, appears in a new window. Notice that the tag displays the page number and the name of the master page on which it is based.



23. Choose **EXTRAS** → **ADD PAGE**. The second page appears, a copy of the price list page in the master layout. Notice here too that the page tag includes the name that you gave the master page. You can append as many pages as you need, according to the size of the price list. Pressing **CTRL+E** is faster than choosing a command from the menu.

Article Number	Description	Illustration	Packaging Unit	Wholesale Price
1	2	3	4	5

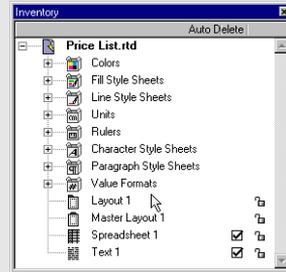
Entering Data

You can now enter data in the price list. Start with the pictures for the first five items. You can use your own TIFF, BMP, JPEG or similar pictures on your PC. Use the Windows Explorer to transfer pictures.

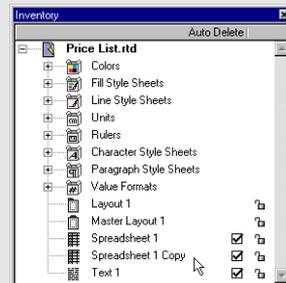
24. Open the Windows Explorer and click **RESTORE** if the Explorer fills your screen entirely.

The new layout appears in the inventory.

No new text component appears in the inventory because the text component on the first page of the layout is the same as the one in the master layout.

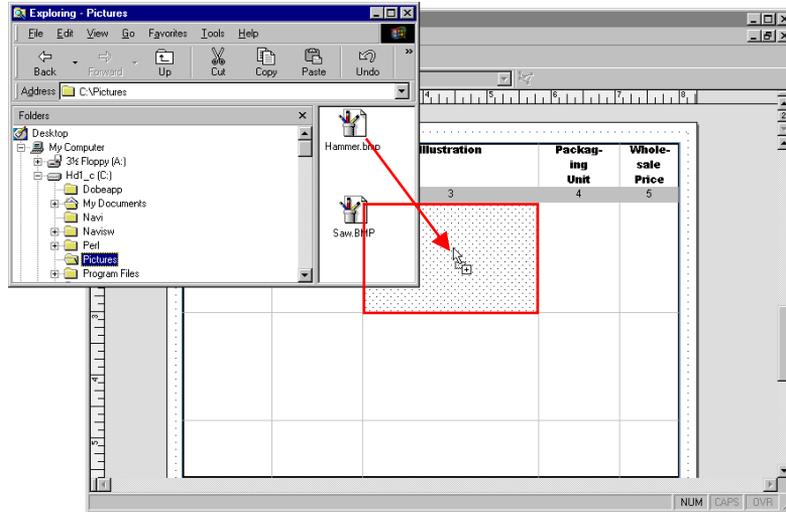


The spreadsheet on the second page of the master layout is set so that a duplicate component is created on any layout page based on the second master page. Therefore, a second spreadsheet component appears in the inventory after a page is added to the layout.



When you drag a picture from the Scrapbook, that application becomes active, and RagTime is in the background. However, RagTime cannot display the dialog box until it is active again. You will hear the system warning sound as a reminder to click in your RagTime document again.

25. Arrange the RagTime and Explorer windows so that the target spreadsheet cell and the picture's icon in the Explorer window are both visible.
26. Drag the picture from the Explorer to the target cell in the price list. Once the pointer crosses over into the RagTime window, it takes on a different appearance indicating that a picture is being imported.



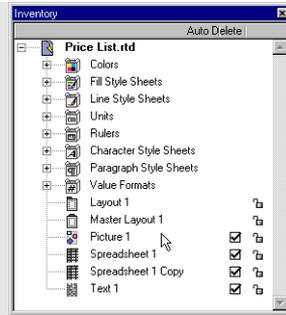
27. Repeat the “Drag & Drop” procedure with the other four pictures for the price list.
28. Complete the price list by entering data in their corresponding spreadsheet cells. If the description of an article is too long for the cell width, click the MULTILINE TEXT button.

Modifying a Master Layout

Thus far, you have created a master layout for your price lists and entered the appropriate data in a price list layout. Now you need to print the list for others who must check if the information about each article and the prices are correct. To assure that the list does not accidentally wind up in the hands of customers, you want to mark all pages as drafts. Some of the advantages of master layouts will now become apparent: neither do you need to add a warning to each page, nor do you need to go to the trouble of later removing individual warnings from the price list. You change only the master page, and RagTime performs the same change on every page based on it.

After you insert the first picture, it appears as a component in the inventory.

The names of the components are assigned by RagTime, but of course you can change them. Select a component in the inventory by clicking it and change the name as you would in the Windows Explorer.



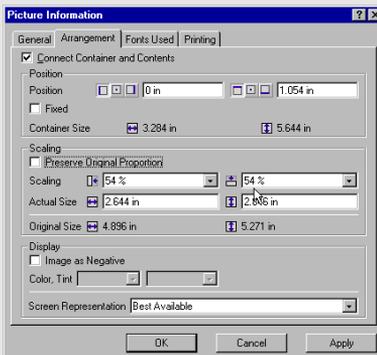
With default settings, RagTime maintains a picture's proportions when importing it into RagTime documents. Since the size of the container does not always match that of the picture, the picture containers often have horizontal or vertical borders. There are several ways of dealing with this situation.

Article Number	Description	Illustration	Packaging Unit	Wholesale Price
1				
				
				
				
				

1. Click the picture. The picture tools appear in the tool bar.
2. Choose **PICTURE** → **FIT CONTAINER TO PICTURE**. This makes the picture and container a “perfect match.”

Please note that you can also enter the picture's scaling manually in the **PICTURE INFORMATION** → **ARRANGEMENT** panel. This feature comes in handy if you have to apply the same scaling to a series of pictures.

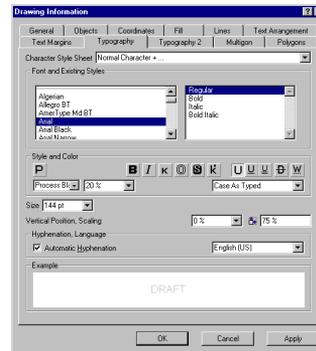
You can also choose **PICTURE** → **ALIGN** to align a picture.



29. Bring the window with the master layout to the front by clicking it. If you cannot see it on the screen, choose **WINDOWS** → **PRICE LIST, MASTER LAYOUT 1** from the menu bar.

30. Click the second master page, “Price list,” somewhere outside the spreadsheet. The tool bar contains the drawing tools.

31. Select the graphic text tool, click approximately in the middle of the page, and type “DRAFT”. Complete the input by pressing the ENTER key. The graphic text object remains selected.



32. Choose **DRAWING** → **GET INFO**. Select the **FILL** panel and choose **TRANSPARENT** so that the object does not cover everything. Now, all you need to do is click **APPLY** and you’re done.

33. Select the **TYPOGRAPHY** panel. Increase the font size to 144 point and reduce the tint to 20%. Confirm your changes with **OK**.

34. Rotate the text approximately 45° , so that it runs from the bottom left to the upper right. You master page should look something like this:

Article Number	Description	Illustration	Packaging Unit	Wholesale Price
1	2	3	4	5

35. Bring the layout window to the front by clicking it. If you cannot see it on the screen, choose **WINDOWS** → **PRICE LIST, LAYOUT 1** from the menu bar. The new graphic text has been transferred to all layout pages based on the second master layout page.

To position the cell contents as you wish, experiment with the horizontal and vertical placement features in the panel ARRANGEMENT in the information dialog box.

If you have closed the master layout window in the meantime, open it by opening the inventory and double-clicking the MASTER LAYOUT 1 component.

When *displaying* width and height, RagTime conforms to standards determined by the selected ruler or to the settings in the panel DOCUMENT in the dialog box opened by EXTRAS→DOCUMENT SETTINGS. Everywhere that you can enter measures of length, you can use all defined units.

You can use the command WINDOWS→AUXILIARIES→UNITS to determine which units are already defined and, as needed, define further units. Experiment and refer to the on-screen reference.

A RagTime is also extremely versatile especially when it comes to integrating pictures. Not only can you integrate numerous picture formats (JPEG, TIFF, Pict, EPS, PNG, BMP, WMF/EMF, DCS, among others) into your layout via drag and drop, you can now also place parts of pictures in TIFF, EPS and JPEG format in transparent mode via clipping paths in compliance with the Photoshop standard to produce new effects. Try it out!

1. Create a clipping path for a TIFF, EPS or JPEG picture in Photoshop, Corel Draw or a similar program.
2. Drag the picture icon from the desktop to a RagTime layout that already contains other elements such as drawings or text.
3. RagTime conceals all picture components that are defined by the clipping paths. Now might be the right time to experiment applying various settings under DRAWING→STACKING ORDER→... to the different components in your layout.

This gives your creativity in designing montages and unusual layouts free reign!

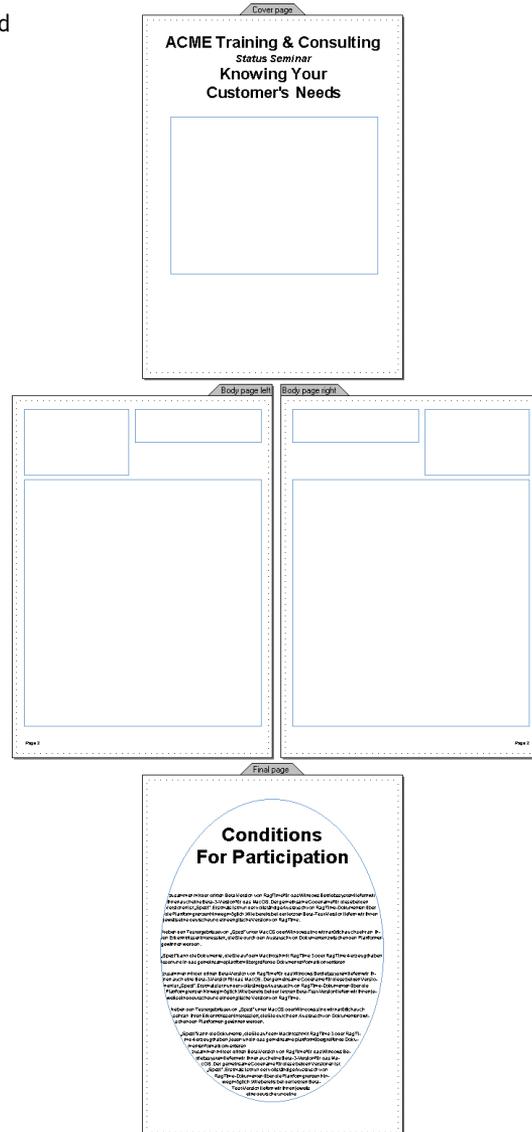
6.3 Exercise 8: Company Training Is Necessary

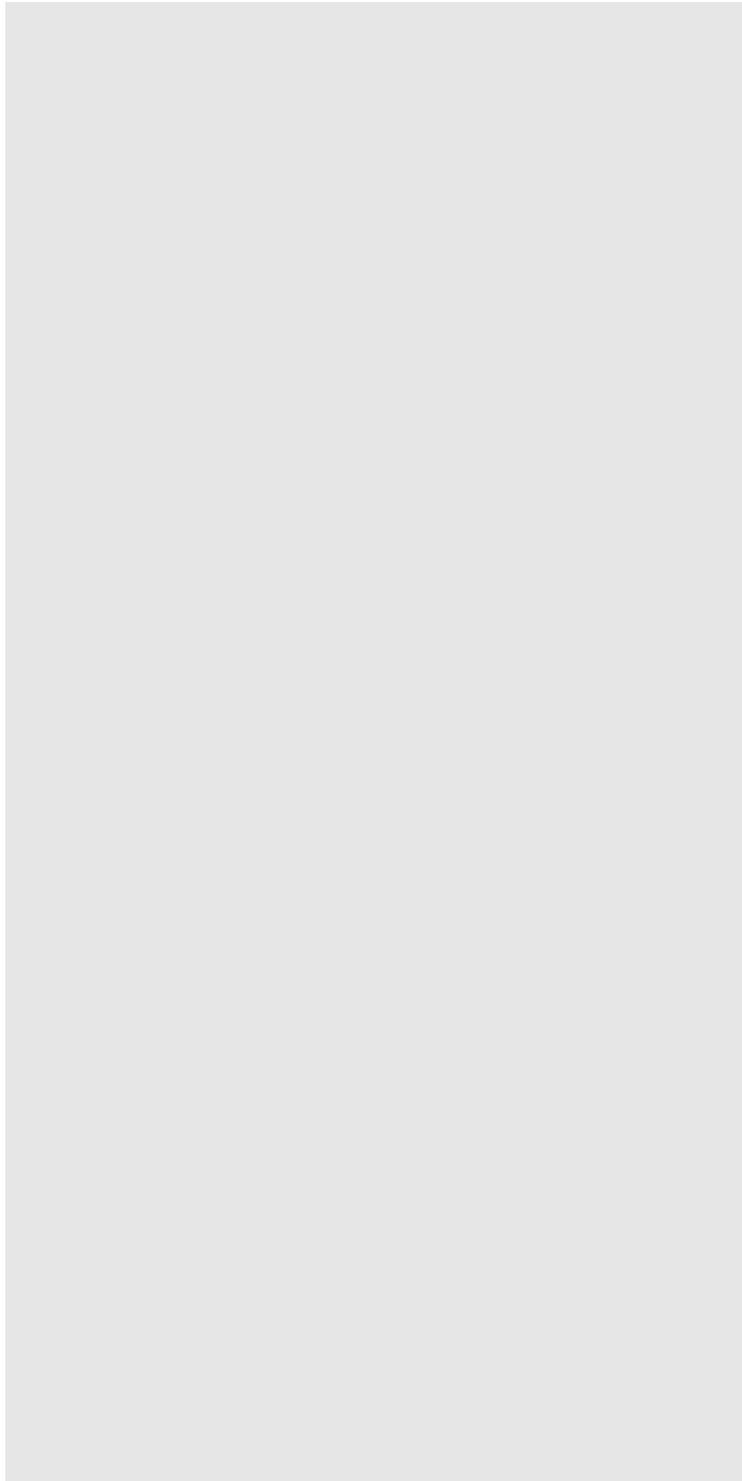
In this exercise, you will design a master layout which is appropriate for many jobs. It can be used as the basis for a technical documentation form, for reports of every sort or, as here, for teaching materials used in company training.

The master layout can be easily adapted to your own ideas when you use the techniques shown here in designing your own documents.

The master layout should provide templates for four pages:

- a cover page;
- a left and a right page for the body;
- a last page with, for example, conditions for participation.





Automatic Page Generation with a Master Layout

Automatic page generation with this master layout works as follows. A layout based on this master layout consists of

- a cover page based on master page 1,
- any number of pages that are alternately based on the left and right parts of master page 2, and
- the final page, which is based on master page 3, regardless if it is a left or a right page.

The Steps to a Master Layout

The procedure for creating and using the master layout described above may be described in a few steps.

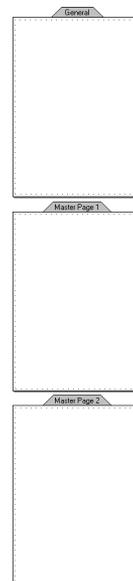
- Creating a master layout
- Creating pages
- Designing pages
- Specifying the use of master pages
- Drawing pipelines
- Creating a layout component based on a master layout
- Specifying the contents type of objects
- Using the layout

Creating a Master Layout

1. Choose **START** → **PROGRAMS** → **RAGTIME** → **RAGTIME** or your favorite method to start the program. Begin a new document with **FILE** → **NEW BEGINNING WITH** → **MASTER LAYOUT**. A master page appears in a new window, and the tool bar contains layout tools.

Adding Pages

2. When you know how your master layout should be constructed and how many differently structured pages you will need, then create the appropriate number of pages. Do this by choosing repeatedly **EXTRAS** → **ADD PAGE** from the menu bar. You need two additional pages for our example. For a better overview, choose **WINDOWS** → **DISPLAY SCALE** → **25%** or **10%**. The three page layout should look like this illustration.



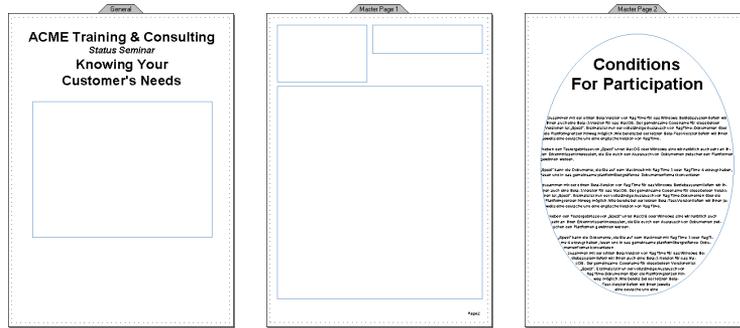
Unlike pipelines in stationery pads, those in master layouts do not determine which page is added when one is needed. The pipelines determine only that a new page will be created in a layout. Which master page will be used depends on the settings in the Master Page panel in the master layout information dialog box.

In keeping with tradition, the right, or recto, pages are given odd numbers, and the left, or verso, pages are given even.

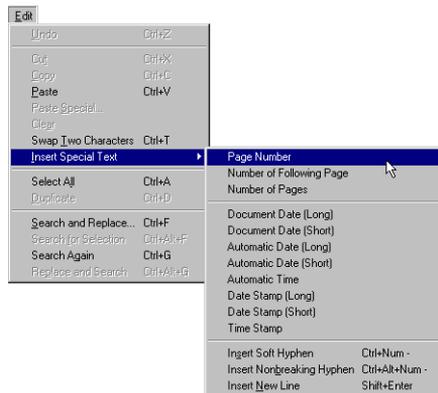
Designing the Pages

These three pages constitute the starting point for designing the master layout. Using the appropriate tools, draw the objects on the pages as shown in the illustration below.

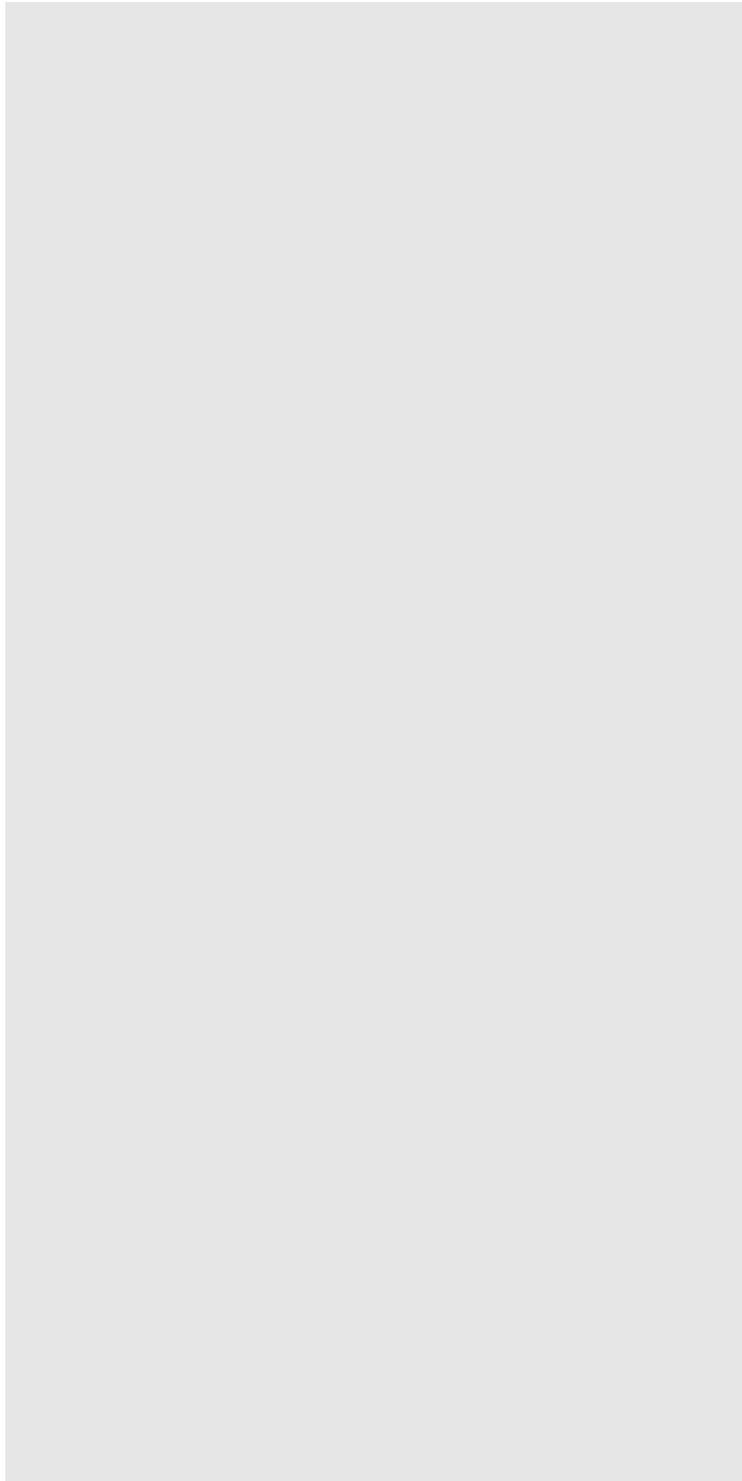
- Design the master layout according to your needs. The structure of the three example master pages differ significantly from one another. We have done this here only for the sake of the exercise, so that you can later easily determine from which master page each layout page has inherited its characteristics.



- A page number should appear to the lower right of the middle page. Select the GRAPHIC TEXT tool from the tool bar and click in the lower right corner of the page.
- Type the word “Page” and a blank space.
- Choose EDIT→INSERT SPECIAL TEXT→PAGE NUMBER. This will insert the page number currently assigned to this master page. Page numbers for subsequent layouts will be calculated and displayed automatically.

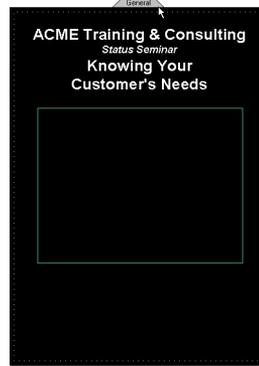


- Move the text object containing the page number to the desired position.

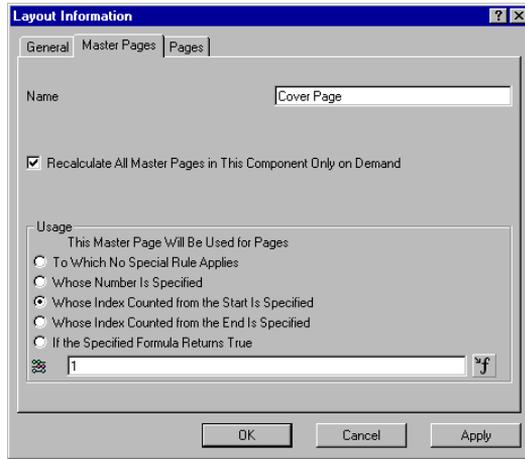


Determining When a Master Page Is Used

8. To specify the use of the first master page, select it by clicking the page tag.



9. Choose Layout → GET INFO from the menu bar. The following dialog box appears:



10. Select the MASTER PAGES panel. Name the master page “Cover page”.

11. Set USAGE for the cover page to WHOSE INDEX COUNTED FROM THE START IS SPECIFIED, and enter the number “1” in the formula entry field since it is the first page. Confirm your changes with OK.

12. Select the second master page.

13. Choose LAYOUT → GET INFO from the menu bar.

14. Name the second master page “Body page”.

15. Set USAGE to TO WHICH NO SPECIAL RULE APPLIES. Confirm your changes with OK.

16. Select the third master page.

17. Choose LAYOUT → GET INFO from the menu bar.

18. Name the third master page “Final page”.

19. Set USAGE for the final page to WHOSE INDEX COUNTED FROM THE END IS SPECIFIED, and enter the number “1” in the formula entry field

You can open the information dialog box for layout and master layout pages by double-clicking the page tag.

All master pages for which USAGE is set to WHOSE INDEX COUNTED FROM THE START (OR END) IS SPECIFIED always appear in layouts based on the corresponding master layout. When you delete such a page, it reappears immediately.

If you use the same index number counted from the start (or end) for several pages, only one of them will appear in layouts. You should avoid this.

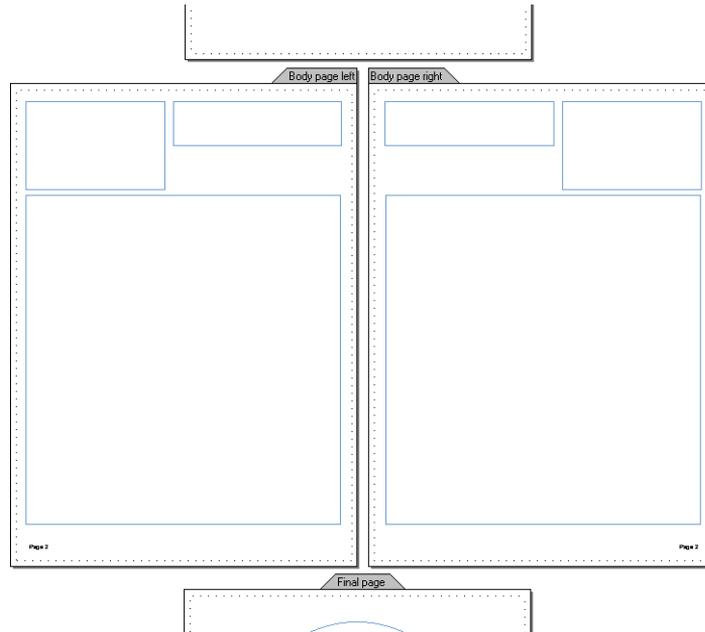
Should the layout derived from a master layout not meet your expectations, verify that the rules set in the LAYOUT INFORMATION → MASTER PAGES panel do not contradict one another.

since it is the last page. Confirm your changes with OK.

20. Since you want the left and right pages to differ, click the page tag.

21. Choose LAYOUT → DOUBLE-SIDED MASTER PAGE.

RagTime creates a left page which is a mirror image of the right page that you designed by moving the positions of the objects. Compare your results with the illustration.

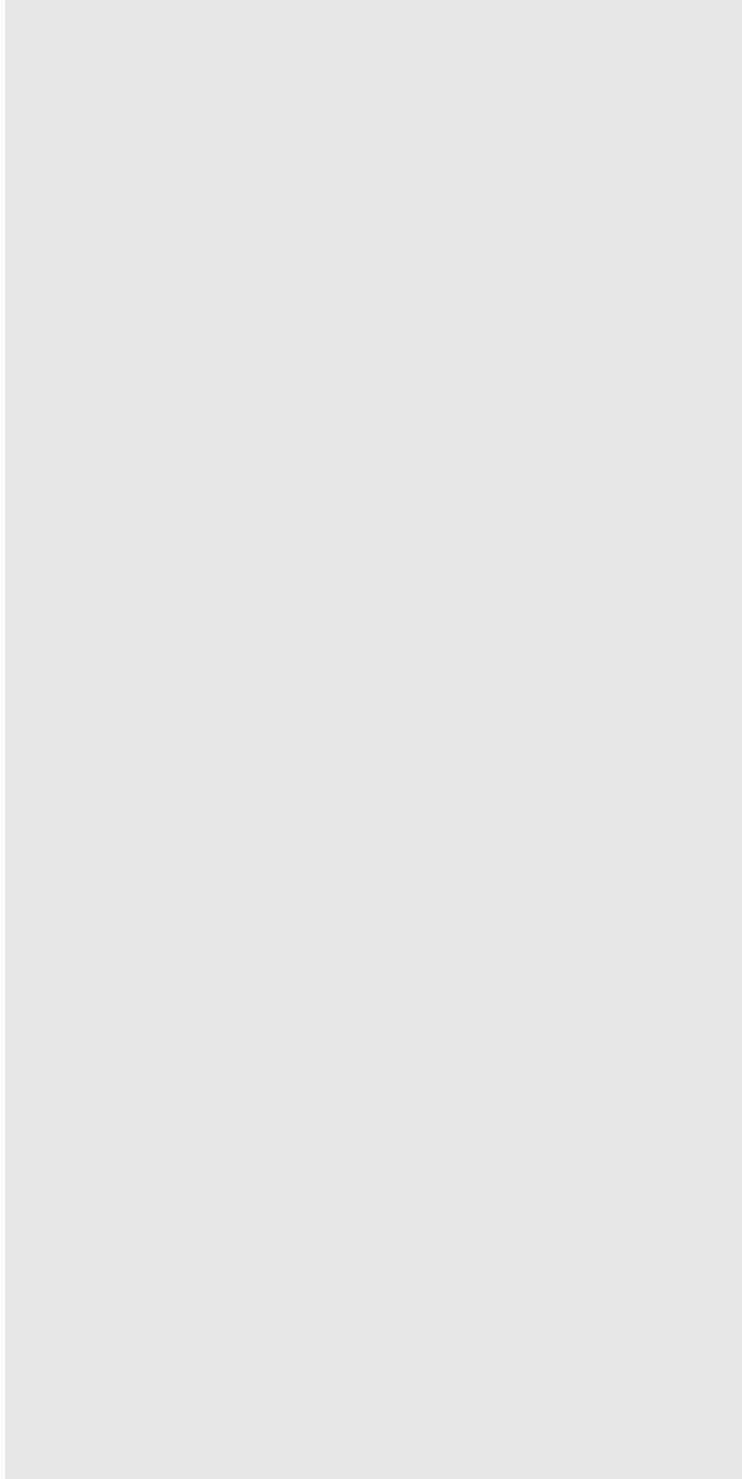


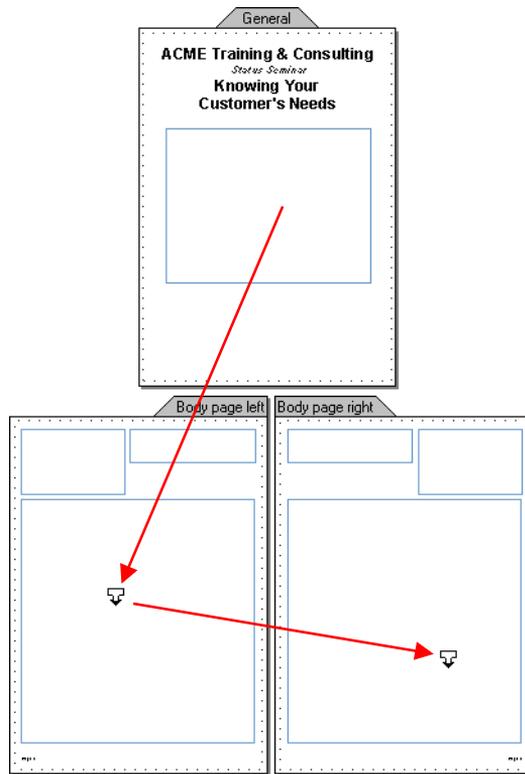
Installing Pipelines

Automatic page generation in layouts based on master layouts is simpler than in stationery pads. You join the objects on the master pages with pipelines and you are done.

22. Select the VERTICAL PIPELINE tool from the tool bar.

23. Join the objects of the master layout as shown in the following illustration.





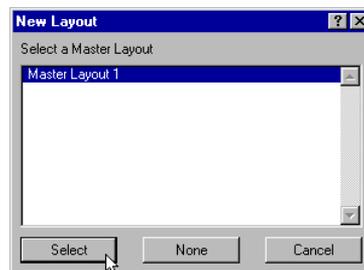
Creating a Layout

After you have finished the master layout for your pages, you can go on to writing the text, making drawings, or making spreadsheets. You need only to create a layout component.

24. Choose **WINDOWS** → **NEW COMPONENT** → **LAYOUT** from the menu bar. The **NEW LAYOUT** dialog box appears.

RagTime presents a list of master layouts from which you can choose one to be used for the new layout. In our example, the list contains only one master layout.

25. Click **SELECT**.



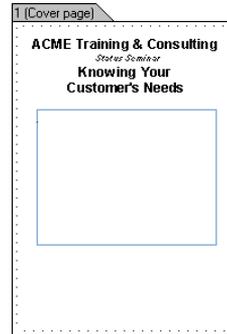
Pipelines in master layouts obey somewhat different rules than those in layouts or stationery pads.

In a layout, a pipeline directly connects the two objects between which it was drawn. When the document is used as stationery, it is exactly the same. In addition, you can draw circular pipelines across one or more objects which serve to append pages automatically in documents torn from stationery pads.

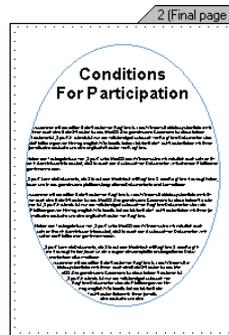
In master pages, on the other hand, pipelines determine that something, for example text can flow into and out of an object. The particular object that will be connected with a given object is first determined when a layout is based on the master layout. Then, first RagTime refers to the rules specified in the Master Page panel of the information dialog to determine which pages must be created. Then RagTime looks for pipeline entries and exits on neighboring pages and connects these objects with each other.

A layout appears with copies of all master pages of which the usage is determined by the index number from the start or end. In this case, the cover and last pages appear.

Notice the page tags display the number of the page in the layout and the names that you assigned to the master pages.



The cover page has the page number 1, an odd number, so it is a right page. The final page has the number 2, an even number, so it is a left page.



Determining the Contents Type of Drawing Objects

Thus far, you have not yet determined the contents of the drawing objects, that is, which components should be installed in them. Assume in this example that you will primarily need text.

26. Select the drawing object on the first page and choose DRAWING→CONTENTS TYPE→TEXT.

Of course you can insert other components, for example a picture or a spreadsheet, in the text if it is necessary at this place. Instead of text, you could also begin with other contents.

Using the Layout and Master Layout

27. When you fill the drawing objects with, for example, text, the appropriate pages are added as needed.

→ The rectangle on the cover page is initially sufficient to contain the entire text.

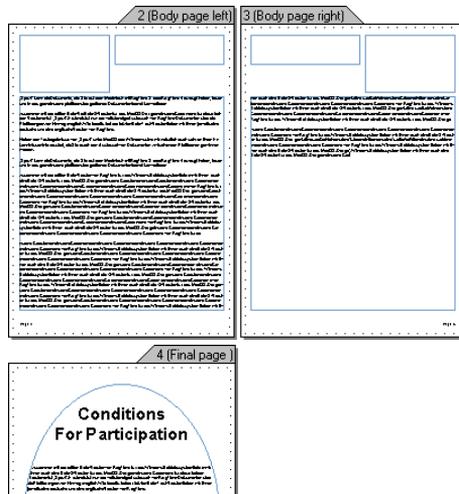
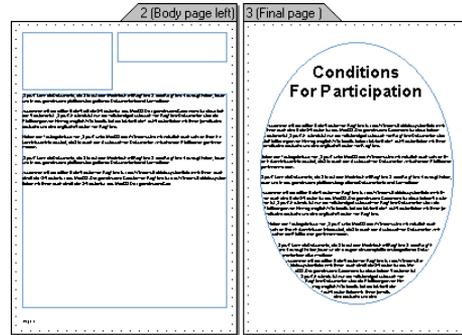
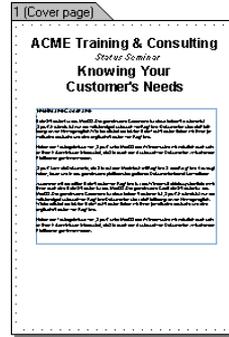
28. Continue to enter text until the space on the cover page is full.

If you need a new page before the text overflows, you can use the command EXTRAS→ADD PAGE at any time.

➔ The cover page is no longer sufficient to contain the entire text. The oval on the final page is not connected with a pipeline, so the overflowing text cannot flow to it. Then a new page is created.

The new page 2 assumes the structure of “Body page” of the master layout, which is specified for all pages to which no special rule applies.

The page has an even page number, so the left part of the body page is used. The final page is moved to the third position, so it is now a right page.



29. Continue adding text until an additional page is filled.

➔ Another page is needed. The rules from the master pages “Cover page” and “Final page” still apply to the first and last pages of the layout. The new page assumes the structure of the second master page, which is specified for all pages to which no special rule applies.

The new page is page three of the layout, so the right page part of the second master page is used. The final page is now page four, so it becomes a left page.

If you continue to add text or create new pages in another way, the new pages will alternately assume the structure of the left and right parts of the master page “Body page.”

If, for example, the text overflows in an object which is connected with pipelines originating in a master layout, a new page is created. Which master page will be used is specified in the master layout. If this page does not have any object with a pipeline through which the text can flow, another new page is created. To prevent this from happening perpetually, after a while a dialog box will point this out to you and you can terminate the automatic page creation.

6.4 Highlights from This Chapter

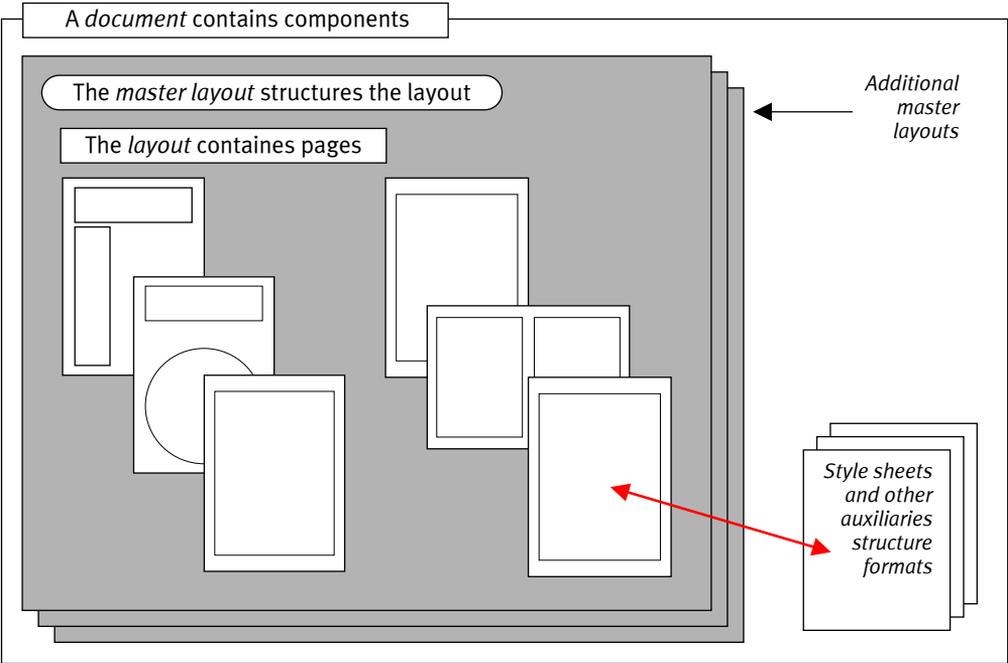
General

- A RagTime document may include one or more master layouts and layouts.
- A layout consists of one or more pages on which containers for components are visible.
- A master layout serves as a pattern for an entire or a part of a layout.
- A master layout consists of master pages which influence layout pages like templates.
- A dynamic connection exists between master pages and layout pages. If the master page is changed, the dependent pages in the layout change accordingly.
- Automatic page generation in a layout is controlled by the master layout.
- The mechanism of automatic page generation can be very precisely controlled through settings in the master layout.

Concerning Exercises 7 and 8

- The command FILE→NEW BEGINNING WITH→MASTER LAYOUT begins a new document with a master layout.
- Pipelines can be laid in both master layouts and layouts.
- Pages in a master layout are constructed in the same way and with the same tools as pages in a layout.
- Data (text, pictures and so on) which should be included unchanged in the layout should be added in the master layout.
- Spreadsheets can contain other components, for example, pictures.
- A layout is created with the command WINDOWS→NEW COMPONENT→LAYOUT. At that point, you can link the layout to a master layout.
- The initial settings of the master layout can be adapted in layouts to the respective requirements.

The structure of a sample RagTime 5 document





Looking Forward

7 LOOKING FORWARD

In this training manual, we wanted to help you get acquainted with RagTime 5. We hope that we were successful.

Space limitations prevented us from comprehensively familiarizing you with all the features of the program. We could only support you in your first efforts as a RagTime novice. Perhaps you have nevertheless sensed the great potential waiting in RagTime, and it remains up to you to discover it.

In the following three steps, you made a start with RagTime:

- the RagTime one-page document,
- the RagTime stationery pad,
- the RagTime master layout.

The following overview summarizes once more the most important aspects of these three types of RagTime documents.

Please note that RagTime always offers several means to the same goal. The procedures presented here must not necessarily reflect your own ideas or methods. Should this be the case, modify them without concern and make RagTime your personal tool.

The One-Page Document

Characteristics

- consists of one page
- has an arbitrary structure
- is relatively simple

Situation

- must be produced quickly
- minimal time for planning is available
- flexibility is of secondary importance

Examples

- mostly documents produced under pressure, such as one-time-only letters, memos, calculations or statistics with graphic representation

Procedure

- create a layout component
- design the page
- define contents types
- use, save and print the layout component (document)

The RagTime Stationery Pad

Characteristics

- consists of an arbitrary number of pages
- is highly structured
- is moderately complicated

Situation

- must be produced quickly
- moderate time for planning is available
- flexibility is of secondary importance

Examples

- mostly standardized, reusable documents (stationery pads), such as business letters with several pages, bids, invoices, payment requests, or standard contracts

Procedure

- create a layout component
- append pages
- design the pages
- define contents types
- save the document as stationery
- tear off pages from the stationery pad, complete, save and print them

The RagTime Master Layout

Characteristics

- consists of an arbitrary number of pages
- is highly structured
- complexity is arbitrary, but usually relatively high

Situation

- relatively simple to create
- time is available for moderate to intensive planning
- easy modification is of primary importance

Examples

- appropriate for all sorts of documents

Procedure

- create a master layout component
- append pages
- design the pages
- define contents types
- define the use of the layout pages
- create layout components based on the master layout
- use, save and print the layout components (document)

Where to Go From Here

Now that you have completed the training, we recommend that you explore the on-screen help with specific questions in mind. You will find on-screen help in INFO menu. Here you will find detailed information about RagTime 5's features.

Explore the on-screen help

Organized under the key expressions, program features which were briefly mentioned or could not be treated in the training manual are concisely explained.

Examine the example documents

It can likewise be interesting to examine finished documents. Examine the numerous examples supplied with RagTime and modify them according to your needs.

Experiment with RagTime

The most important recommendation that we can give you for further work with RagTime is experiment!

Don't be afraid to try things out in the program. Save a file, for example from one of the exercises in this book or from the installation CD, under another name and systematically try out all possible parts of the program on this file. Here are a few suggestions for your experiments:

Information dialog box

Experiment with the panels of the information dialog boxes. Choose one after the other: DRAWING GET INFO, TEXT GET INFO, SPREADSHEET GET INFO, BUTTON GET INFO, and so on.

Document Settings Settings

Experiment with the panels in the DOCUMENT SETTINGS and SETTINGS dialog boxes.

Double click

Choose EXTRAS DOCUMENT PREFERENCES, and EXTRAS SETTINGS.

Tear off menus

Find out how the program reacts to a double click in various places. Find out which menus you can tear off and position them as palettes in convenient places on the screen.

Find out which methods of dragging or duplicating data RagTime supports within and between documents.

key words : copy or cut and paste

duplicate, for example, drawing objects or containers using keyboard shortcuts

duplicate, for example, drawing objects or containers by dragging (CTRL+drag object)

drag and drop

import and export

Style sheets

Find out how style sheets can simplify your work. Choose WINDOWS AUXILIARIES.

Experiment with the command SEARCH AND REPLACE. You will find it in the EDIT menu. You can also search for formats!

.....> If you have a scanner, find out what features RagTime 5 offers
(FILE.....>SCANNERS AND CAMERAS...).

WWW server Surf by our Web pages (www.ragtime-online.com) from time to time. This is where we post program improvements, sample solutions and documents, information on new releases, related RagTime products, existing mailing lists and dictionaries in various languages. The tidbits we upload to our server are usually yours for free!

We hope you have fun with this brief selection of suggestions and hope that when working with RagTime, you always reach your goals along the shortest and fastest way.

