

RAGTIME 4

INTEGRATED DOCUMENT PROCESSING

About RagTime 4



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Overview

1 OVERVIEW

The RagTime 4 documentation consists of several parts on various media.

- “Training Manual” (printed)
Eight exercises in three steps for those new to RagTime 4
- “RagTime 4 for RagTime 3 Users” (printed and on-line)
Differences between RagTime 3 and RagTime 4
- “RagTime 4 Reference” (printed and on-line)
Overviews and information about documents and components as well as an alphabetical reference of all menus, commands, tools, windows and their panels
- RagTime 4 Formulas and Functions (on-line)
Descriptions and examples of the functions and operators
- This brochure “About RagTime 4”

The on-line documentation is installed together with the program on your hard disk. It is intended for reference and contains detailed information about commands, options, functions and so on. All chapters are connected with cross references (hyperlinks) and there are versatile search features (index, command and function overviews, text search).

This brochure provides basic information about RagTime 4. It consists of three sections which are, for the most part, independent of each other and may therefore be read in any order.

The chapter about installing RagTime 4 describes the normal software installation which, with the help of the familiar Apple installation program, runs automatically in most cases. In addition, it goes into detail concerning installation on servers and the related questions of licensing and authorization codes.

The second chapter elaborates on the purpose of the various RagTime 4 software modules and their configuration on your computer’s storage medium.

The closing chapter introduces in detail the concepts and ideas which make RagTime 4 unique. It demonstrates the broader design of the program with examples, mentions in sections about specific options relationships which are not immediately apparent and familiarizes you with RagTime 4 which will make your daily work with this program still more productive.

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Installation

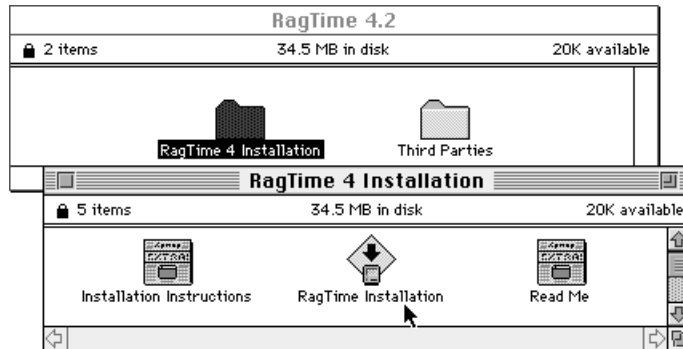
Installation from a CD ROM  Installation from
a File Server  Authorizing RagTime 4

2 INSTALLATION

2.1 Installation from a CD ROM

Starting the Installation Program

Before you can use RagTime 4, you must install the program on your hard disk. Insert the program CD in your CD ROM drive and open the folder RAGTIME 4 INSTALLATION.



Note: If you traded the CD for a set of floppy disks, these disks contain everything to create the folder RAGTIME 4 INSTALLATION on your hard disk. Insert the first disk, double click the archive and follow the instructions on the screen. After that, you can continue the installation as described here.

Note: If a file server is available, and you expect to install RagTime 4 on more than two computers, please refer to the section “Installation from a File Server” below.

Starting the Installation Program

Start the program RAGTIME INSTALLATION by double-clicking the program icon. The start-up picture is displayed. Click CONTINUE. The installation program now prepares everything for an easy installation on your computer.

Easy Installation

We recommend the easy installation. It installs the complete software needed for your computer, the on-line documentation and all the samples.



Custom Installation

If you do not want to install all the files, or require a version of RagTime 4 which runs on both 680x0 and PowerPC computers, choose CUSTOM INSTALL in the pop-up menu. All the available RagTime 4 elements are then listed.



- ➔ To install a version which runs on all Macintosh computers, check INSTALL RAGTIME 4 WITH ACCESSORIES FOR ALL MACINTOSH COMPUTERS.
- ➔ If you want to install only some elements of the software, click the triangle and check the desired files.

Where Should RagTime 4 Be Installed?

The installation program creates a RagTime 4 folder in which all elements are installed. The destination folder selected in the installation program determines this folder. Use the SELECT FOLDER button to specify the target folder that you want.

You can also install RagTime 4 from a file server; refer to the information below.

Beginning Installation

To start the installation, click **INSTALL**. The program determines which installation steps are necessary and then begins to install the files in the selected destination folder.

Depending on the installation selected, it may be necessary to restart your computer. Please follow the instructions on the screen.

The first time the RagTime 4 program starts, you must enter the authorization code as described below.

2.2 Installation from a File Server

If you are using a Macintosh in a network having a file server, it may be appropriate to install RagTime 4 from the file server. You will be spared running around with the installation CD, and a CD ROM drive is not needed for each Macintosh.

Copying Installation Files to a File Server

To install from a file server, you must first copy the folder **RAGTIME 4 INSTALLATION** to the file server.

If you have administration rights, and the file server has a CD ROM drive free, insert the RagTime 4 CD in it and use the server administration program to make the CD available to the desired group of users. In this case, no further storage space on the file server is required.

If the method described above is too much trouble, and sufficient storage space is available on the file server, copy the complete folder **RAGTIME 4 INSTALLATION** on the RagTime 4 CD from your workplace computer to the file server.

Note: If you traded the CD for a set of floppy disks, these disks contain everything to create the folder **RAGTIME 4 INSTALLATION** on the server volume. Insert the first disk, double click the archive and follow the instructions on the screen.

Installation on the Workplace Computer

Now you can begin the installation on individual workplace computers.

Make sure that the necessary privileges for the file server volume are shown in the Finder of the workplace Macintosh. Start the program **RAGTIME INSTALLATION** from the folder you have just created and perform the installation as usual. Please note that the destination folder must be on the hard disk of the workplace computer.

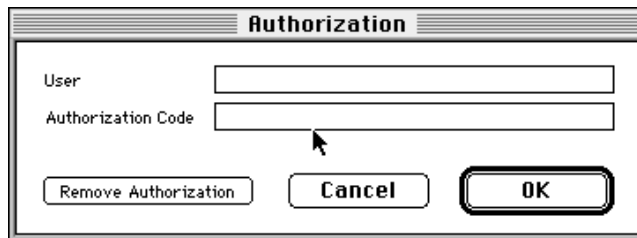
After the installation, each user can start his or her version from the local hard disk. The first time the RagTime 4 program starts, each user must enter the authorization code as described below.

For a site license, please contact the address printed on the back of the license certificate.

2.3 Authorizing RagTime 4

After installation, you can try RagTime 4 without saving documents. To convert a RagTime 4 demo version to a full version, you need a valid authorization code and, in some versions, a user name. When you purchase RagTime 4, you will find them on a card in the package.

Start RagTime 4 and click **AUTHORIZATION** in the start up picture. You will be asked to enter your authorization code.



The image shows a dialog box titled "Authorization". It contains two text input fields: "User" and "Authorization Code". Below the "Authorization Code" field, a mouse cursor is pointing at it. At the bottom of the dialog box, there are three buttons: "Remove Authorization", "Cancel", and "OK". The "OK" button is highlighted with a thick border.

Enter the authorization code in the appropriate field. You can ignore upper- and lowercase spelling. Authorization codes consist of only the digits 0 to 9 and the letters from A to F. (The letter O is not used.)

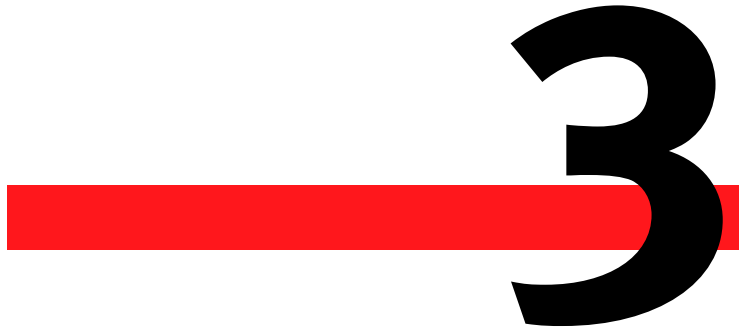
If the registration document also contains a user name, enter it in the field **USER**. Enter the name exactly as it appears; upper- and lowercase spelling as well as blanks are important.

After you click **OK** your entries are confirmed and you receive information concerning your authorization. Your copy of RagTime 4 is now ready for use and you can save your documents.

If you give the computer or hard disk on which RagTime 4 is installed to someone else but wish to keep your license for RagTime 4, you must rescind the authorization. You can open the authorization dialog box via the command **ABOUT RAGTIME** in the Apple menu. Click the button **REMOVE AUTHORIZATION**. RagTime 4 is then a demo version again.

A Few Tips

- Read the document “Read Me.” You will find it in the installation folder of the RagTime 4 program CD. After the installation, you will find it in the RagTime 4 program folder also. This document contains information which did not occur to us until after printing the manuals or which was, due to the fast-changing hardware market, too late to be included.
- If you have been using RagTime 3 until now, you can continue to use the external functions of this program in RagTime 4. Copy them to the “B & E” folder in the RagTime 4 program folder. You will find additional tips for RagTime 3 users in the on-line documentation or in the “RagTime 3→4” manual.
- If an installation disk or the installation CD is defective, please contact the address printed on the back side of the license certificate.



RagTime 4 Files and Folders

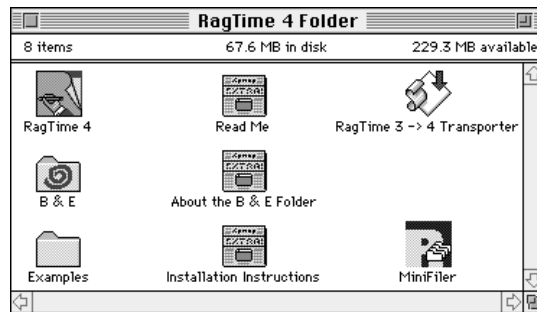
The Program Folder  The “B & E” Folder  In the System Folder

3 RAGTIME 4 FILES AND FOLDERS

RagTime 4's installation program saves a number of software modules in various folders on the selected storage medium. This chapter shows you where each module is saved. It also explains the purpose of the individual files and points out possible variations and extensions.

3.1 The Program Folder

RagTime 4's central storage place is the program folder. This is the folder with the name RAGTIME 4 FOLDER, which was created during the installation in the place you selected. You can change the folder's name as well as move it to another place within the folder hierarchy of your storage medium.



→ Read Me, Installation Instructions

These SimpleText documents contain information about the program which is either important for installation or was too late to be included in the printed and electronic manuals. It is recommended always—not just for RagTime 4—to open and read “Read Me” documents before starting the corresponding installation program.

→ RagTime 4

This is the file which contains the many, many commands for your computer which constitute the functionality of RagTime 4.

→ RagTime 3 → 4 Transporter

An AppleScript program which eases the conversion of large numbers of RagTime 3 documents to RagTime 4 documents. This script controls the conversion of your documents; the actual conversion is performed by RagTime 4, which the transporter launches, if necessary.

→ MiniFiler

A database program for creating and maintaining address data. A group of RagTime 4 functions allows very flexible integration of the

contents of this database in RagTime documents, for example, labels or mass mailings.

→ Examples

In the “Examples” folder, you will find a set of RagTime 4 documents which may suggest ideas or serve as models for your own creations.

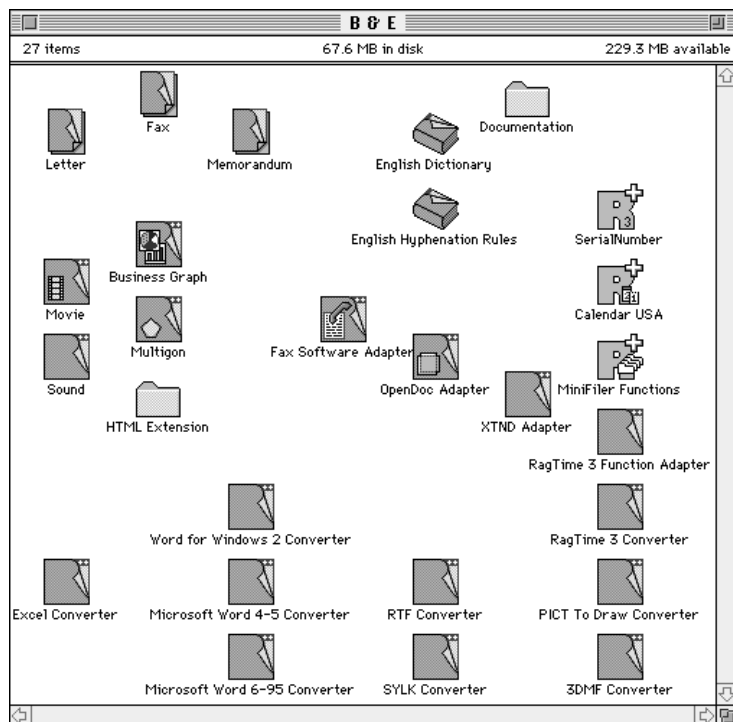
→ B & E Folder

The “B & E” folder is described in a following section.

3.2 The “B & E” Folder

The “B & E” folder contains files which extend the functionality of the RagTime 4 program in various ways. Normally, this folder should be “taboo” for you. In your day-to-day work, there should be no reason to change, delete or add files here.

Of course, if you have extensions for RagTime 4, this is exactly where they belong. These may be both functional extensions (including external RagTime 3 functions) and additional dictionaries and hyphenation rules for other languages. Changes which you make in this folder take effect only after you relaunch RagTime 4.



Program Extensions

RagTime 4 was designed from the start to be very modular and open, and is prepared for the possibility of extending functionality with external software modules. This technique may already be familiar to you from other programs, for example “XTensions” for QuarkXPress or “Plug-Ins” for Adobe PhotoShop.

The external modules “Multigon,” “Business Graph,” “Sound” and “Movie,” which provide the functionality of the corresponding tools or components, are included in the RagTime 4 package.

Further, the program extensions include “adapters,” which link other software technologies to RagTime 4. The “RagTime 3 Functions Adapter” enables RagTime 4 to use external functions written for RagTime 3, and the “OpenDoc Adapter” makes it possible to build Apple OpenDoc Live Objects into RagTime 4 documents.

Standard Stationery Pads

The commands NEW BEGINNING WITH and NEW DOCUMENT display, in addition to the component types, a list of stationary pads which are stored in the “B & E” folder. You can change the list of stationery documents by adding the appropriate stationery pad to, or deleting others from the folder. Newly added stationery pads are recognized automatically by RagTime 4 after a new launch and displayed in the selection dialog box.

Dictionaries

The files containing the rules for hyphenation and spelling are placed in the “B & E” folder. Dictionaries and hyphenation rules for additional languages must likewise be saved here.

Converters

Because the world (unfortunately) does not consist of RagTime 4 users alone, but the exchange of electronic data must nevertheless be possible, RagTime 4 can process very many file formats of other programs. For each of these different formats, there is a special converter which will be activated by the commands OPEN, IMPORT or EXPORT when you want to open or create a document in a non-native format.

On-Line Documentation

The on-line documentation files are stored in the folder “Documentation” within the “B & E” folder. They are marked with the document type “RagTime Help document.” Likewise, “RagTime Help,” the program which makes the features of the on-line documentation available, is placed here. It is launched automatically when you choose a command in the Help (?) menu while RagTime 4 is active.

3.3 In the System Folder

RagTime 4 is gentle on your system folder; only your settings and your own files for the on-line documentation are placed in the “Preferences” folder.

Program-wide settings and resources:

→ RagTime 4 Cache

The file “RagTime 4 Cache” is a cache for frequently used program resources. It enables a quick launch of the program with the last used work environment. There is no “content” information placed in it.

→ RagTime Preferences

The file “RagTime Preferences” is the classic file for program settings: the window position, the position and state of the palettes and the entire appearance of your work environment.

→ RagTime Auxiliaries

The file “RagTime Auxiliaries” contains all the definitions of characters, paragraphs and so on which are located in the “RagTime Auxiliaries” portion of the auxiliary editor dialog boxes, and consequently are available to all documents. You should delete this file only if you are absolutely sure that you will not need any of these auxiliaries any more!

→ Notes and Bookmarks for the On-Line Documentation

For each part of the on-line documentation, there is one file with the corresponding name with a note symbol (t) appended.

If you would like to begin again with RagTime 4 fresh from the start, you can delete the files in the “Preferences” folder at any time. However, in the process you will lose all the notes that you made in the on-line documentation and the settings and formats described above. The next time it is launched, RagTime 4 will automatically create a “fresh” set of the necessary files.



Ideas and Concepts

The Grand Design  The Best Concepts  The Ideas in Detail

4 IDEAS AND CONCEPTS

We would like to familiarize you in detail with the concepts and ideas which make RagTime unique. This section should provide you, the interested user, the planning administrator, the researching journalist, with an overview of the consistency and elegance of a program design, the sheer functionality of which is beyond enumerating.

Many of the things listed here are not noticed on the first examination of the program, but will be of enormous significance for productivity in daily work.

4.1 The Grand Design

The program for all the work having to do with printed paper in the office—RagTime 4 makes this claim even more proudly than RagTime 3, proven by time and loved in many large and small offices.

Document processing is RagTime 4's domain, and its structure is optimized for it. In addition to the classic word processor, the highly sophisticated spreadsheet is of great use in daily office life. A full-featured drawing module and versatile layout features extend the application range to writing books or creating catalogs.

And—most important—all the components are perfectly integrated; there are no tacked-on parts or weak points. Text, spreadsheet, layout, drawing, picture, sound, movie and graph components lead their fields in capability. Do you think suddenly of “multimedia”? Yes, RagTime 4 is extremely multimedial—although not merely for magazine headlines, but for daily, profitable use.

In contrast to many other integrated programs, not only are various components present, but the functions are integrated. If you run a spelling check in your RagTime 4 document, for example, texts are checked not only in the text components but also, among others, in spreadsheets, in the axis labels of a 3D graph and in the labels of a floor plan. Much the same is true for the style sheets: your number format which properly formats a Japanese sum of money in a spreadsheet works trouble free in a graph or normal text.

And finally, RagTime is “use neutral.” You can use it as a word processor, a calculation system or a layout program; there is no required “starting document,” no “one should best start with a text module.” All RagTime 4 components are equal and can be used according to your requirements.

4.2 The Best Concepts

We would like to demonstrate the above principles with a few selected examples.

A Document

Something which may be understood as an entity in the world—a book, a business letter, a form letter—is a document in RagTime 4 and, what cannot to be taken for granted, exactly *one* file on the storage medium!

It is bothersome and error prone when, for example, the title page or the table of contents of a publication exists as a separate document. These extra documents may be forgotten during a spelling check, changes in style sheets may not be adopted and finally, in the hectic time before a deadline, a second express delivery to the print shop may be necessary.

RagTime 4 allows you to keep everything in one document. It doesn't matter what sort of contents are combined in this document; even different page formats or similar supposedly “basic” settings are possible without trouble.

Drag and Drop

Easily moving and copying arbitrary elements of a document by clicking them with the mouse, moving the pointer to the desired position and inserting them by releasing the mouse button is one of the most productive features of graphic user interfaces of modern computer systems.

But the elegance and speed of this technique translates into productivity only when the user can count on “drag and drop” to work always and in all directions. The RagTime 4 user can, for example, drag

- a word or a component from a document to the Finder's Trash
- a line style sheet from the inventory to the border of a rectangle drawing object
- a complete layout from one document to another
- a value format onto cells of a spreadsheet
- data from a spreadsheet to a graph, in order to display them there
- data from a spreadsheet to a text, in order to use them for a mass mailing.

And as icing on the cake, the “Tetris key” for fast work. While you drag a color from the color palette over your memo, simply press the space bar whenever the pointer is over an object which should have this color. Without interrupting the drag-and-drop procedure, independent elements scattered throughout the document are assigned the color.

Style Sheets

Many programs provide style sheets. In most cases, information about font, font size and proportions of text within a paragraph are grouped under a name. In RagTime 4, all attributes of objects may be set with style sheets. You can make style sheets dependent on one another as well, whether of the same or different types: a fill style sheet determines the color of a line style sheet, a line style sheet determines the underline style of characters and so on.

- ➔ Fill style sheets determine, for example, which color or pattern fills areas.
- ➔ Line style sheets determine, for example, how wide or with which dashing lines are represented.
- ➔ Character style sheets determine the style (font, size, embellishment, spacing and so on) of texts in all components, whether in the body of a letter, the axis labels of a business graph or the title of a button.
- ➔ Paragraph style sheets determine, for example, how text is indented or the distance between lines and paragraphs, whether in a text component, a spreadsheet cell or the legend of a business graph.
- ➔ Value formats determine the representation of calendar dates, times, time spans and numbers in text or spreadsheet cells.
- ➔ Style sheets for units of length permit a completely free “dimensionalizing” of your document; your own units for “My Line Height” with subdivisions in an arbitrary scale lead to precise and consistent results.



The Inventory Window

You’ve never seen this anywhere before: in the inventory window, you have an ordered overview of all components and auxiliaries used in a document. It has never been easier to find outdated style sheets, check formatting and layout or classify and determine the origins of pasted pictures.

This inventory window is not a passive list; every component or auxiliary can be edited directly: a double click opens the appropriate component window or editor dialog box; with drag and drop, components may be duplicated or moved between documents or to the Finder.

Naturally you don’t need all that to quickly write and print a formless fax. But as soon as you want (or must) use a standard form, and your documents must be uniform and organized, this inventory list will become an indispensable aid.

Scripting

Any computer program's existence is justified by its ability to automatize repetitive tasks. RagTime 4 offers you every imaginable possibility for automatization with a nearly perfect implementation of AppleScript, an easy programming language for users.

No additional programming skills are necessary for this. With the simple but effective concept of "recording," RagTime 4 observes your actions and notes their precise sequence. You can save a script created this way under a name of your choice and can run it at any time.

4.3 The Ideas in Detail

We would like to illustrate the RagTime 4 concepts in somewhat more detail below. To this end, we will take you to the world of components and containers in the next section, and then you will learn specifics about the auxiliaries that RagTime 4 puts at your disposal.

Note: Please keep in mind that this chapter clarifies the ideas and concepts of RagTime 4; it is not a reference work for the program. The following sections discussing particular program elements are interesting highlights which are neither completely nor exhaustively treated here. You will find details under the appropriate key words in the on-line reference or in the reference manual.

Components

What is a RagTime 4 document, actually? How is it put together and structured? What does it consist of? How are the individual parts related to one another?

To understand the answers to these questions well, you should be aware of the differences between appearance and reality, that is, between what you see on the screen and what can be printed, and the inner structure. Knowing how to differentiate has shown itself to be enormously practical and raise productivity.

Just take any catalog or price list as an example. Such printed works and, of course, the documents on which they are based frequently have a remark like "Call now—1 800 555-1212—24 Hours a Day!" at the top or bottom of each page.

This sentence appears several hundred times, namely once on every printed page. In reality, this "text component" occurs only once in the RagTime 4 document on which it is based. However, the program projects it at the appropriate place on all pages on the screen as well as in the printed form.



The immense advantage is obvious: it saves memory and, if this spectacular sentence has to be changed one day, the revision of the one text component is automatically visible on all pages.

The RagTime 4 building blocks with contents are called “components.” A document may consist of an arbitrary number of components. There are a number of component types corresponding to the different types of information that you include and individually edit in a document: for example, the “spreadsheet” component is for tabular data, the “drawing” component is for illustrations, and so on.

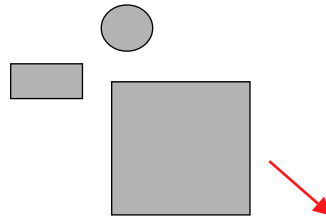
Initially, every component is autonomous and behaves like the corresponding program which can only work with a special type of information. For example, if you create a new “text” component in RagTime 4, you first get a window providing a complete word processor including footnotes, style sheets, spelling check and so on. You can save and print this component. In this case, appearance and reality are identical: the document is the component and the component, the document.

However, some types of components can contain additional “containers.” A container is an object which can contain a component; the component’s contents are displayed and may be edited within the container’s borders. The “layout” component is a classical example of this; it serves only the purpose of containing other containers which, in turn, display the contents of other components. An example of this is a document which ekes out its existence as a fax stationery pad. It includes a layout component with three objects serving as containers for the two text components “Fax Head” and “Fax Text” as well as the picture component “Company Logo.”

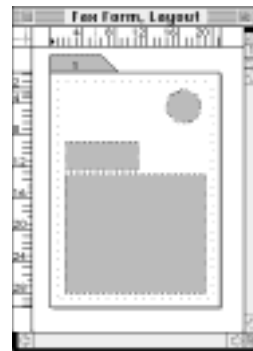
The three components are still independent. You can edit and print the picture component with the company logo in its own window, and the same goes for both text components. The three are not a fax form until the individual parts are “laid out” as a stationery pad with the help of the layout component; that is, a circle object becomes the container for the picture component, a small rectangle object, a container for the fax head and a larger rectangle object below it, a container for the text component “Fax Text.” If the layout component is then printed, a real fax form appears on the paper.

But even this doesn’t explain our catalog example mentioned at the beginning. First our components and containers must become more flexible: components may be installed in containers which in turn are in components which are installed in containers which are in components—RagTime 4 can continue indefinitely, as long as your computer’s available memory permits. The conception of RagTime permits arbitrarily deep embedding of components! We won’t pursue this further here, but you should look again at the catalog example from above.

A “layout” type component, which forms the outer frame of the “Fax Form”



Three containers, which determine the position and shape of the display of the future contents, are added.



Both of the “text” type components and the “picture” type component are dragged into the appropriate containers.



The text component with the number to call occurs once as a component in the catalog document. In addition, there is a corresponding master layout component containing a rectangle object. This rectangle serves as a container for the text component. Then a layout component is created, that takes the appropriate master layout page for each page of the catalog. That is, each catalog page assumes the structure and the individual contents of the corresponding master page. So the document consists of a text component, a master layout component and a layout component with the catalog pages. To sum up: the text component is displayed in the rectangle object of the master layout component, which in turn determines the contents of all pages of the layout component derived from that master layout. The layout pages then produce the pages which are printed.

And now so that we—and if you ask me, probably the programmers of this program as well—don't lose track of all these nice components, we have the inventory window. In it, all the parts of the document are neatly ordered. All the components, as well as the auxiliaries described below, are listed in it. Since you can change the names of the individual components, you can maintain order even in large documents. In addition, a small icon next to each component name indicates the component type. Double-clicking a line in the inventory list opens the component in its own window and permits editing of exactly these data isolated from the rest of the document.

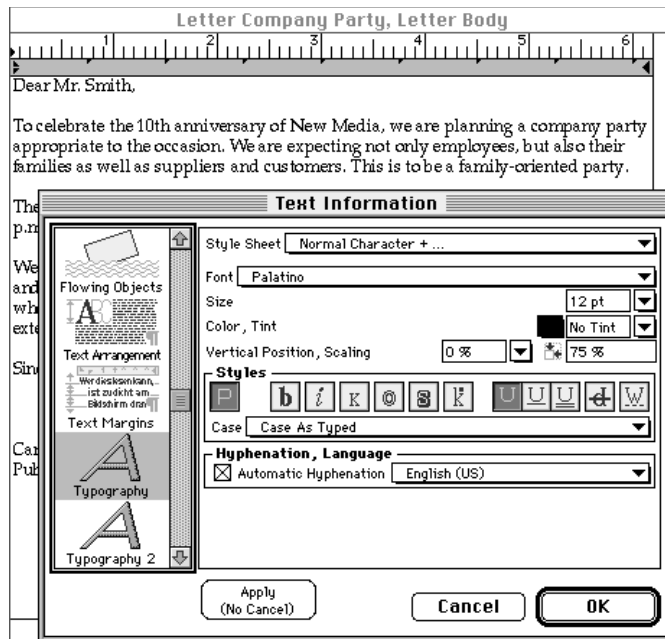
In the remainder of this section, we will list the RagTime 4 components individually and demonstrate their characteristics.

The Text Component

The RagTime 4 text component provides you with a complete word processor. Among the most important formatting features are the style sheets for paragraphs and characters which enable you to assign a text a predefined group of format attributes in one step. A style sheet can include practically all the settings which are possible for characters or paragraphs.

Character styles affect, among other things, the precise horizontal and vertical spacing of the characters as well as the scaling of individual characters including small caps.

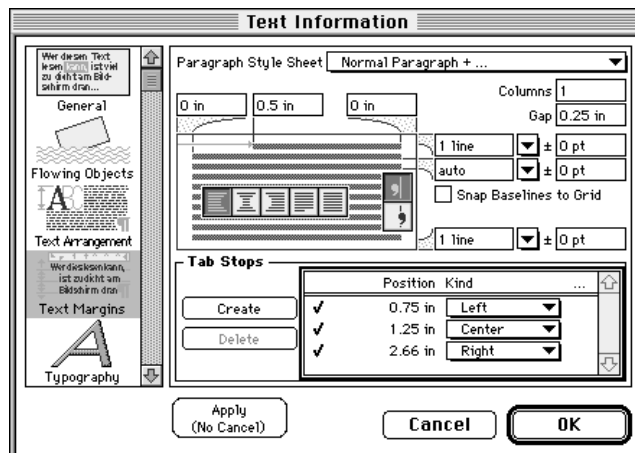
With paragraph styles, you can specify where and how paragraphs are to break and what format the following paragraph should have. RagTime 4 masters text columns: the columns' specifications may be varied on a per paragraph basis in every text component. You can balance them at the end of a text and define the gap and set rules between them.



You can also create hanging initials, the larger letters at the beginning of paragraphs, and specify the line on which the text should continue in the information dialog box in the Text menu.

It goes without saying that the text in text components “flows” through pipelines which you create, whether in drawing objects or spreadsheet cells.

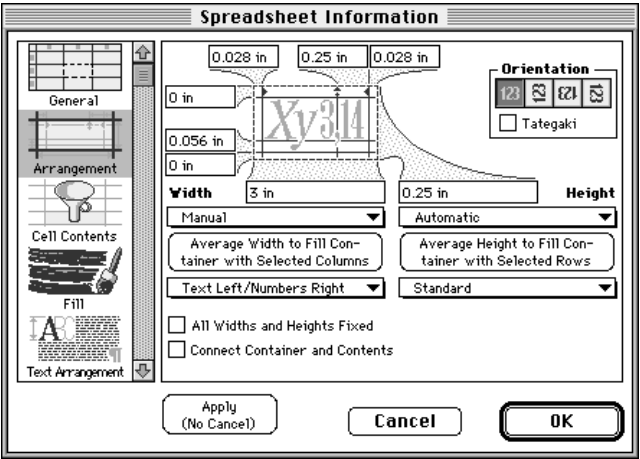
Of course the RagTime 4 text component provides automatic creation of indexes based on selected words and of tables of contents based on paragraph format, and automatic sequential numbering of footnotes, whereby symbols may also be used as markers.



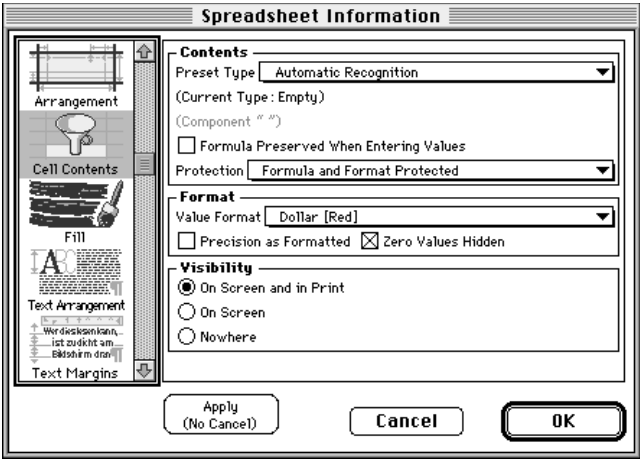
The Spreadsheet Component

Spreadsheets, or worksheets, are flexible tools with which you can manipulate numbers and tables and perform complex calculations. The features of tabular presentation make spreadsheets very useful for general layout tasks as well.

Every spreadsheet component can extend over 16,000 rows and 16,000 columns. For more complex structures, the grand master of calculation extends into the third dimension with 16,000 planes stacked behind each other. And—a RagTime 4 specialty—every single cell is a container which can contain any other component!



RagTime 4 again demonstrates the degree of its integration in the range of possible formulas. You can make references to cells in other spreadsheet components or other documents, or from graphs to spreadsheets. Spreadsheets may contain references to button components and



vice versa. If a document having references to a second document is opened, RagTime 4 checks if changes were made in the second document and updates all references accordingly.

To overcome the limitations of the world of paper, spreadsheet components may be extended to any number of containers both horizontally and vertically with independent pipelines. That way, even large spreadsheets can be distributed among many printed pages in a controlled layout at last.

Neighboring cells may be joined in a union to satisfy even the most demanding spreadsheet layout. Of course, functions and references remain completely intact.

The Layout Component

The layout component is the basis of many documents created with RagTime 4. It supplies the frames, the drawing board or the layout table on or in which the other components and containers may be positioned.

All the familiar aids such as rulers, grid and guide lines are available. The work surface consists of pages on which you can create all sorts of lines, symbols and other drawing object. Most of these objects then serve as containers for the document's other components.

A layout may contain pages of different sizes. Usually there is a standard page format for the entire component, and you define exceptions for individual pages.

You must make it clear to yourself that a layout component is not the equivalent of a RagTime 4 document, as you often have seen in similar programs. A RagTime 4 document may consist of different layouts. Numerous components may be installed in every layout. And since the same component may be included in different layouts, changes in a text in one layout are transmitted to all other layouts in which the component is installed.

The Master Layout Component

A master layout is a sort of template for layout pages and has dynamic links to all the pages created from it. First, it adds to the layout the parts which are to be the same on all pages created from it and second, it provides mechanisms for automatically adding pages.

If a new page is added to a layout which is based on a master layout, RagTime 4 determines which master layout page to add next according to one of the rules which you have given.

A layout page based on a master page includes the objects and pipelines which exist on the master page. If you change objects on master pages, all the pages derived from it are also changed. Pipelines in a

master layout are used for automatic page creation in layout components.

Again, what has been said holds true here: a RagTime 4 document may include a number of master layout components which influence various numbers of layout components.

Thus the resulting printed page is the conglomerate of components and containers added to a basic master layout and layout.

The Drawing Component

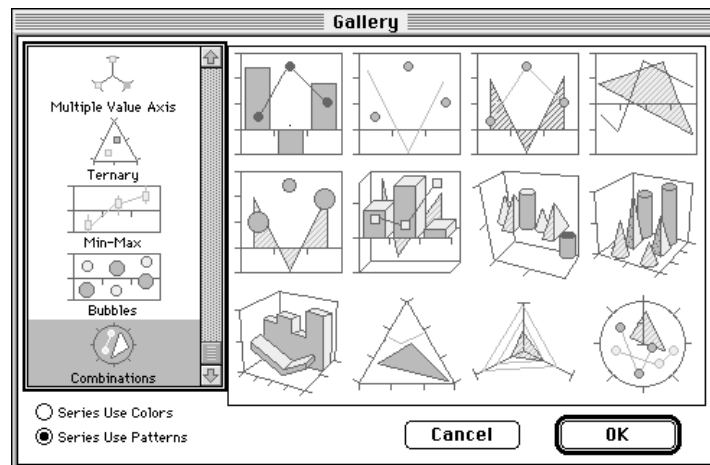
A drawing component provides a uninterrupted surface on which you can draw. It is not divided into pages like a layout component. The drawn objects can, for the most part, also serve as containers. A drawing component provides a work area of several square meters on which you can draw, group, turn, scale and arrange objects of all sorts (lines, rectangles, polygons, Bézier curves and so on).

The Graph Component

The graph component offers numerous two and three dimensional graph and series types, for example category, pie, x-y and x-y-z graphs and special graph types like multiple value axis, ternary and polar graphs. Depending on the graph type chosen, series may be represented in various ways including columns, areas, lines, candles and error bars.

3D graphs may be rotated on three axes and permit changes in the point of the light source and perspective.

The data which are to be displayed can be easily transferred from spreadsheet components, and changes in the spreadsheet are automatically updated in the graph.



The Button Component

Button components serve to standardize and automatize documents. You can control user input and start program scripts with them.

A button component, which must be installed in a container, may be a push button for performing a calculation or a command, a checkbox, a pop-up menu or a group of radio buttons.

The Picture, Sound and Movie Components

Images of nearly every type can be stored in picture components. In addition to PICT, EPS, TIFF, other, more exotic, formats may be imported with the provided converters. Converters allow import directly from scanners. All pictures may be precisely scaled and positioned with simple means.

Pictures may also be linked to source files by subscription or may be imported completely into a document.

You can change the color representation of some picture file types by editing the response curve or colorizing monochrome pictures.

RagTime 4 documents may contain sound. If your computer has the necessary hard- and software, you can record and play back speech, music and other acoustic events.

Likewise, QuickTime movies may be embedded. The display window can be scaled, and when the movie is stopped, the still image may be manipulated like other pictures.

Auxiliaries

The expression “Auxiliaries” groups together program elements which can change the formatting and representation of data or components and which you can create and employ as you wish beyond the limits of a document. The auxiliaries include, among others, the much-loved style sheets for fill, lines, characters and paragraphs, as well as scripts, formats for representing values as well as units of length and rulers.

The universality of the auxiliaries is the deciding factor. As we have already said repeatedly, RagTime 4 is designed to make all elements complete and independent. As a result, you can define an auxiliary “wide red line” in the line style editor and change absolutely everything which has a line structure. There are no separate line styles for picture borders, spreadsheet borders, underlining in text, lines in drawings or line series in a graph.

Auxiliaries are kept in the inventory just like components. The mutual dependencies are also easy to recognize in this display. The respective attributes of the auxiliaries are automatically inherited by





their “children,” so that it is very easy to develop and use well structured and consistent style sheets.

The following is a list of the auxiliaries that RagTime 4 offers. All of them are thought out to the last detail and provide you with hundreds of possible settings. Cleanly designed editing windows, consistent in form and easy to use, will help you.

- Fill style sheets
- Line style sheets
- Character style sheets
- Paragraph style sheets
- Units
- Rulers
- Names
- Index entries
- Value formats
- Commands and scripts
- Personal dictionaries

4.4 In Conclusion

These pages about the ideas and concepts behind RagTime 4 which you have just read are too modest a space to present all the thought and discussion behind such a well developed product based on long years of practical experience.

Nevertheless, we hope that with these lines, we have brought you closer to understanding the potential of RagTime so that you can gradually use it to do productive work.

The consistency and precision with which the concepts were realized may at first lead to amazement, and the many features may appear to be more confusing than helpful. But RagTime will reward you at nearly every step because what you learn in one place, you can use again in many other places in the program, so that the learning curve rapidly climbs.

The team at B & E Software would like to hear from you. Send us your praise, criticism and comments concerning your and our RagTime 4 in a conventional letter or electronically.

We wish you great success in your work with RagTime 4!