Boswell ™

Your Personal Archive Librarian

Manual

Please read this document all the way through before installing or using Boswell. This is **not** a Mac product like others you are familiar with. It **does** need some introduction. Simply double-clicking on the application and playing around with it will only result in frustration. We know this sounds strict, but someday you will thank us for it.

Version 1.0

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What is "Boswell"?

Boswell is a small application that you will probably always have open. It is intended to be your preferred way of storing text and referring back to it later, whatever task that text might originally have been associated with. For instance, it allows you to easily maintain a permanent chronological record of almost all the text you enter and possibly all the e-mail you read. Boswell not only stores the text, but retrieves and organizes it as well.

As time goes by this becomes increasingly valuable. It provides to you the advantages of augmented memories that huge computerized databases have long given to corporations and governments; and it gives it to you with a minimum of fuss and administrative overhead.

Computers were not always personal. They got started as very expensive tools to help out large corporations, the only ones who could afford them at the time. What we now call a file started out as a reel of magnetic tape that contained numbers, like the payroll records for March, 1972. It was a physical object stored in a physical place: the payroll rack, the 1972 shelf, the third slot over. It was obvious where to find something. There was a place for everything and everything should be in its place; if that tape found its way to the personnel rack, Omaha office shelf, someone would get in trouble. Moreover there was only one tape per month to keep track of and there were no months without tapes.

It was a system that made sense at the time and was retained when disk drives replaced tape reels: racks and shelves became what we now call folders. The way files are organized now is much the way tapes were organized then, but a file is simply not what it used to be. Now it is something like a e-mail from Fred Jones requesting some time off for a skiing trip in next January or February and also detailing his work on the Harris project in June and his plans for July. Should it be stored in the folder for Fred, the Harris project, reports, plans, vacations, January, February, June, or July?

In the future, if you were deciding on next year's vacation schedule or comparing the progress forecast for the Harris project with what was actually accomplished, you would want to look at this e-mail again and compare it with others like it. How could you do that? Any decisions about where the file should be stored must be made long before it will be retrieved and you can never tell exactly what you will be interested in when you want it again.

Yes, there are searching mechanisms that can give you a list of files that contain a specific word, but if it is time to apportion the year-end bonuses, they will not help you to rate the ability of Fred Jones to accurately predict his progress.

Boswell is an attempt to give you the ability to store and retrieve your information in a new way. You can assign items to multiple groups, you can make complex queries about all the items Boswell knows about, and you can easily group and compare individual items. Moreover, Boswell tries to make this process easy and almost automatic; so much so that letting Boswell manage all your e-mails and other text that interests you will become second nature.

Overview

The basic units of information in Boswell are not files but page-like items of text called Entries. These contain a large area for the content of the Entry, which is comparable to the contents of a file. They also have headers containing meta-information (information about information) about the Entry somewhat the way an operating system has information about a file: name, creation time, comments, and such.

The Entries are created in a special window called the Journal and are later stored on disk in a group of files called the Archive. They are viewed in sortable collections called Notebooks. Because Entries cannot be removed from the Archive, you never have to clean things up or worry about something important being thrown away. All the Entries, the Journal, the Archive, and Notebooks taken together are called the Library.

All Entries start out Fluid but become Frozen. A Fluid Entry can still be changed, but a Frozen Entry cannot. A Fluid Entry can only exist in the Journal -- no Notebook can contain it. When an Entry Freezes it loses the ability to change, but it gains the ability to join groups. Removing (Zapping) a Fluid Entry from the Journal Freezes it and makes a permanent copy of it in the Archive. Here it is available for Putting in a Notebook where it can be viewed.

While Entries can be moved out of both the Journal and Notebooks, these actions can only be undone for Notebook Entries because they cause a Fluid Journal Entry to become Frozen and Boswell does not allow Entries to "thaw." Going from Fluid to Frozen is irreversible.

Once Frozen, an Entry stays Frozen forever. This is not quite as harsh as it sounds: once you type on a blank sheet of paper, you cannot make it blank again.

Notebooks enable you to group together Entries which share some common topic or feature and sort them by their header values. Using a dialog window we call the Hub, Entries can be added to a Notebook by searching the Archive for all those that match user-specified time, header, or content criteria. Other Notebooks can be searched as well. A Browser window allows any Entry in any Notebook to be viewed with just some scrolling and two double-clicks.

In brief, you can stuff all your e-mail into Boswell and later get a usable response to a request like, "get me everything I sent to Fred (but not Bob) last March about the Harris project deadline where the word 'desperation' was used and sort the results by time."

Boswell's Terminology

Because Boswell does some very new things, we have had to invent some new words to describe them. In an effort to make things clearer for you, whenever a word is used with a Boswell-specific meaning it is capitalized. We realize this new vocabulary may take some getting used to, so please allow some time for that. There is a full glossary at the end of this manual, but here are the worst offenders.

An "Entry" is Boswell's basic unit of data: some text content plus a "header" containing some small items of information about that content.

A "Notebook" is a collection of Entries which you can sort by many criteria. It can be displayed in its own window.

The "Journal" is a specialized Notebook where new Entries are created. Its window, which cannot be closed, contains a single scrolling column of re-sizeable Entries much like paragraphs in a word processing document.

"Fluid" Entries are recently created and can still be changed. They only exist in the Journal

"Frozen" Entries can no longer be changed. They are automatically moved from the Journal to the Archive. Some of them wind up in Notebooks.

The "Archive" is a collection of files which contain all the Frozen Entries.

The "Library" contains everything: the Journal, the Archive, and all the Notebooks. It is your personalized Boswell universe.

"Put" means to place a copy of an Entry in one or many Notebooks. An Entry can be Put into a Notebook many times but there will never be more than one instance of it in that Notebook.

"Zap" means to remove an Entry from a Notebook. It is an odd term, but it might help to think of a bug zapper or a bolt of lightening striking something leaving only a puff of smoke in its wake. Zapping does not destroy the original Entry -- you can always use the Hub find it again in the Archive.

"Put-Zap" takes an Entry from Notebook A, Puts it in some other Notebooks, and then Zaps it from Notebook A.

"Sifting for Clues" is an automatic process intended to help in Putting Entries into the right Notebooks. Clues are character strings you have already associated with one or many specific Notebooks; a Notebook's name is automatically considered a Clue for that Notebook. Sifting searches the text in an Entry's content and header fields for Clues to create a list of Notebooks. This takes place when you decide to Put an Entry. A list of suggested "target" Notebooks is provided which you can accept, filter, or enlarge.

"Zip" Puts an Entry in Notebooks without you having to decide where it will go. Rather than opening a dialog with suggested targets the way Put does, Zipping simply assumes the Notebook list created by Sifting for Clues is correct and does its work without bothering you for any input or approval. Another odd term -- try thinking of those automatic mail sorting machines in the Post Office that rely on Zip codes.

"Zip-Zap" Puts an Entry automatically and then removes it from its original Notebook.

The "Hub" is an elaborate dialog window that works with groups of Entries which meet criteria you specified to do such things as Putting Entries into or Zapping Entries from Notebooks.

A "Browser" (which is not to be confused with a Web browser) is a window which allows you to see a list of all the Notebooks in a Library, another list of all the headers in a selected Notebook, and a single selected Entry. Individual Notebooks can also be viewed in a Browser layout.

A "Tag" is a small header text field used to group Entries for sorting. It is the only alterable value in a Frozen Entry and very handy for organizing Notebooks.

When an Entry is "Cloned" a new Fluid Entry is created whose contents starts off as a duplicate of the "parent" Entry.

A text file can be "Imported" to create a new Fluid Entry. The contents starts off as a duplicate of the file's text.

Entries

An Entry is an item in the Journal and, later, in the Archive and possibly some Notebooks as well. The most important part of an Entry is the text content. This is comparable to a page in a paper notebook. It is not of fixed length, but is assumed to be short.
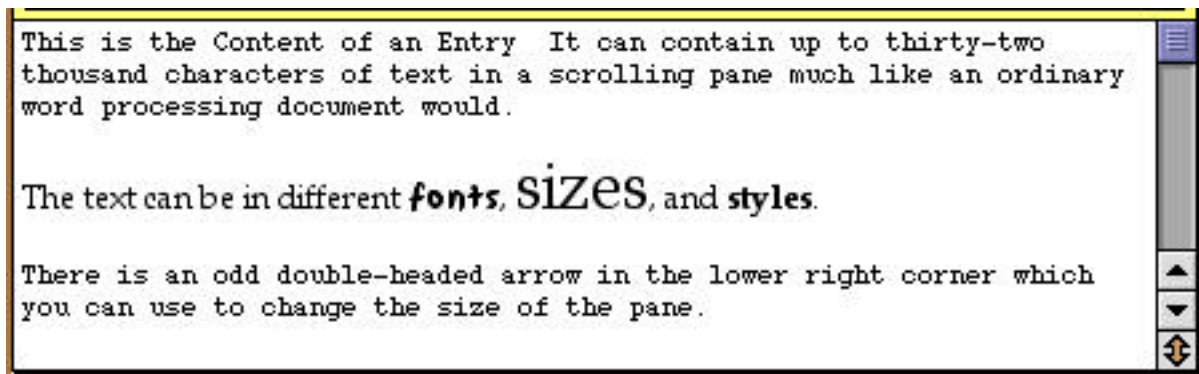

Figure 1. What An Entry's Contents Looks Like

The contents is the most important, and largest, part of the Entry. Entries can currently store up to 32,000 characters of text, but are at their most effective when storing much smaller amounts -- something along the lines of an e-mail or an average newspaper article. The text editing capabilities of the content area are limited and definitely not intended to replace a word processing application. The size and content of the Entries in our documentation Library should give you an idea of what we have in mind.

And if you think 32,000 character is not enough text to do much work with, please tell it to all the folks who told us this manual was too long -- its text could be contained in just two Entries.

The text's font, its size, and its style can be changed. It can be searched using the Find commands in the Text menu. If it is still Fluid, find-and-replace can be done as well. A small pane in the lower right contains a double-headed arrow. Dragging here changes the size of the content pane.
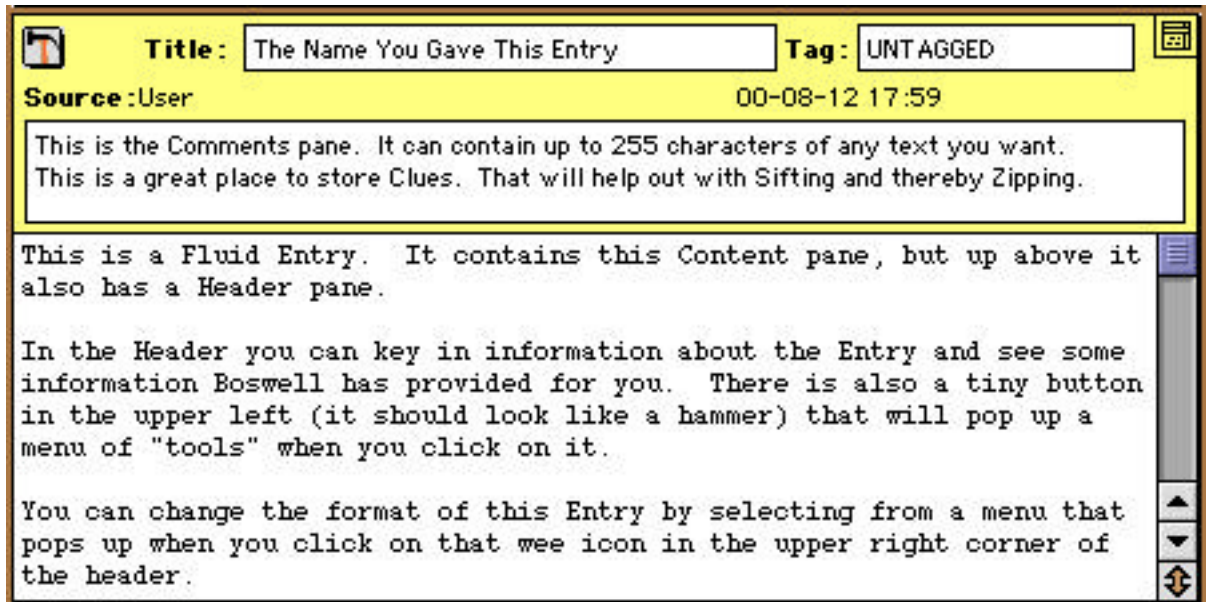
Figure 2. What A Fluid Entry Looks Like

An Entry also has a header area at the top containing information about the contents as well as some popup menus. Let's cover all these in order, top to bottom and from left to right.

Figure 3. The Tools Popup's Small Icon

The tools popup is a small icon of a hammer head that causes a popup menu of frequently-used functions to appear when it is clicked. By having this small icon on every Entry's Header, it is much easier for you to understand which Entry is being acted upon. Had we used the standard Mac convention of selecting an Entry (which would have a frame drawn around it to show that it was the current selection) and then choosing an action from an Entry menu in the menu bar, we ran the risk of Entries scrolling out of view.

The Title is an Entry's primary identifier, comparable to a person's name. It does not have to be unique, but your life will be much easier if it is an accurate description of the Entry's contents

The Tag is an Entry's secondary identifier and is very useful when it is **not** unique. It is comparable to a person's job title or rank. The idea is to label the Entry as belonging to some group of Entries so they can be sorted together. It is also useful for assigning a specific position to an Entry and relying on sorting to move it there. Note that the Tag is the only part of a Frozen Entry that you can change; the same Entry can have a different Tag within each Notebook that contains it.

Figure 4. The Entry Format Popup's Small Icon

The first line ends with another small icon that generates a popup to change the format of the Entry. This format popup allows you to hide or reveal the content pane and sections of the Header, enabling you to view Entries in a database or document format as well as seeing everything they contain. The following graphic shows you the possibilities.
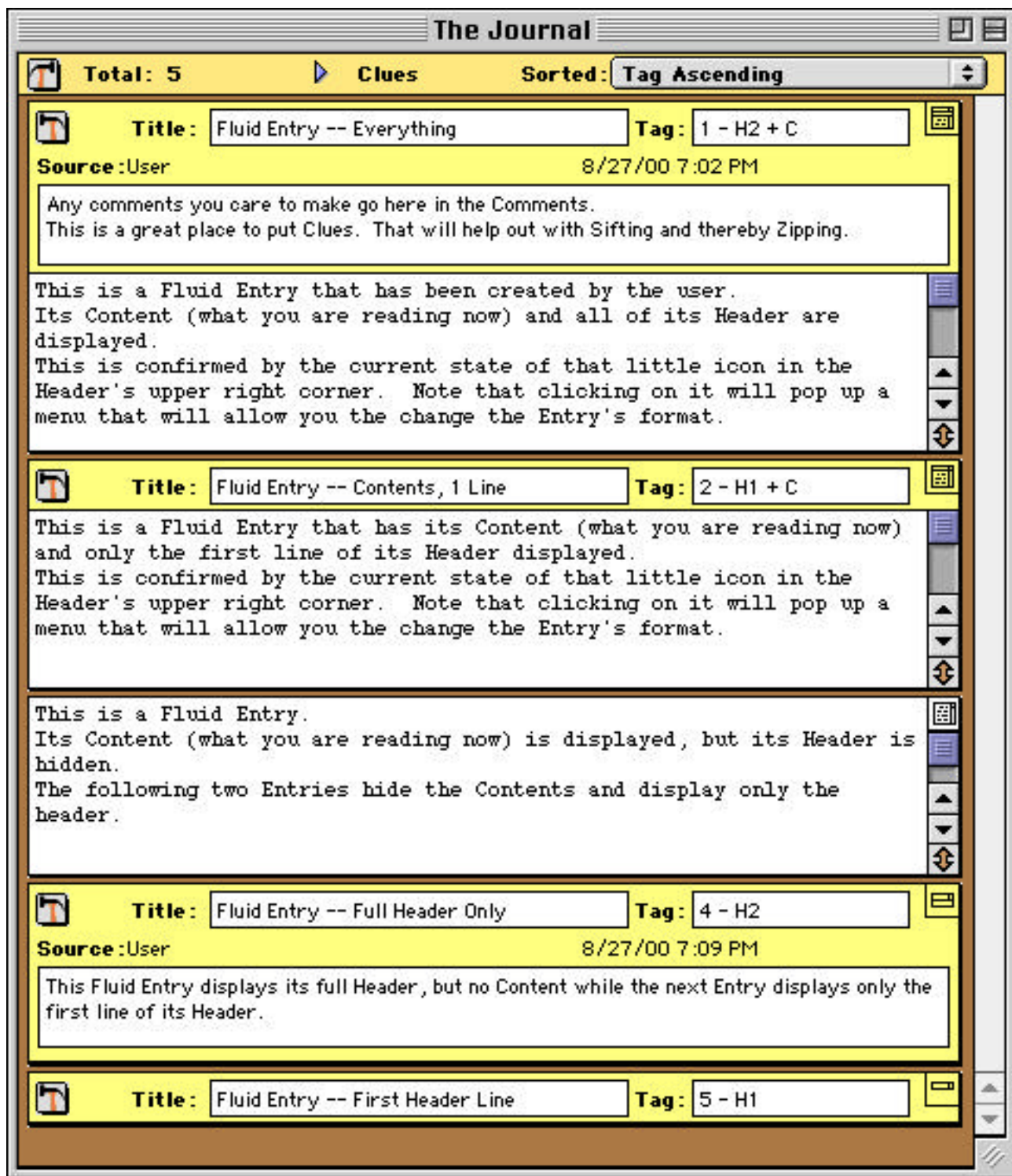
The Journal

Total: 5   ▷ **Clues**   **Sorted:** Tag Ascending

Title: Fluid Entry -- Everything   **Tag:** 1 – H2 + C

Source: User   8/27/00 7:02 PM

Any comments you care to make go here in the Comments.
This is a great place to put Clues. That will help out with Sifting and thereby Zipping.

This is a Fluid Entry that has been created by the user.
Its Content (what you are reading now) and all of its Header are
displayed.
This is confirmed by the current state of that little icon in the
Header's upper right corner. Note that clicking on it will pop up a
menu that will allow you the change the Entry's format.

Title: Fluid Entry -- Contents, 1 Line   **Tag:** 2 – H1 + C

This is a Fluid Entry that has its Content (what you are reading now)
and only the first line of its Header displayed.
This is confirmed by the current state of that little icon in the
Header's upper right corner. Note that clicking on it will pop up a
menu that will allow you the change the Entry's format.

This is a Fluid Entry.
Its Content (what you are reading now) is displayed, but its Header is
hidden.
The following two Entries hide the Contents and display only the
header.

Title: Fluid Entry -- Full Header Only   **Tag:** 4 – H2

Source: User   8/27/00 7:09 PM

This Fluid Entry displays its full Header, but no Content while the next Entry displays only the
first line of its Header.

Title: Fluid Entry -- First Header Line   **Tag:** 5 – H1

Figure 5. Examples Of All The Entry Formats

The second line of the Header contains only the Source and the Timestamp of the Entry's creation. The Source tells where the Entry originated; comparable to a person's parents. There are three possibilities: you created it from scratch so a user-specified signature was used; it was Imported from a file so a "folder_name:file_name" format will be used for the Source; or it was Cloned from

another Entry so the parent's title will be used as the offspring's Source. Note that both these fields are assigned as soon as the Entry is created and cannot be changed

The third area of the header is text for Comments. Here you can make whatever notes you want about the contents of the Entry, but you can also use this text to assign Clues to the Entry which may not already exist in the contents. This is very important for Sifting; so much so that the Journal window has a list of Clues which you can drag-and-drop into the Comments

Entries have two states: Fluid and Frozen. When you create a new Journal Entry it starts off Fluid, which means that its text content and most of its information fields may be modified. Once a Journal Entry is Put, Zipped, or Zapped it becomes Frozen, and from then on none of its content or fields except the Tag may be modified. A process we call Tidying ensures that no Journal Entry will remain Fluid for more than thirty days.
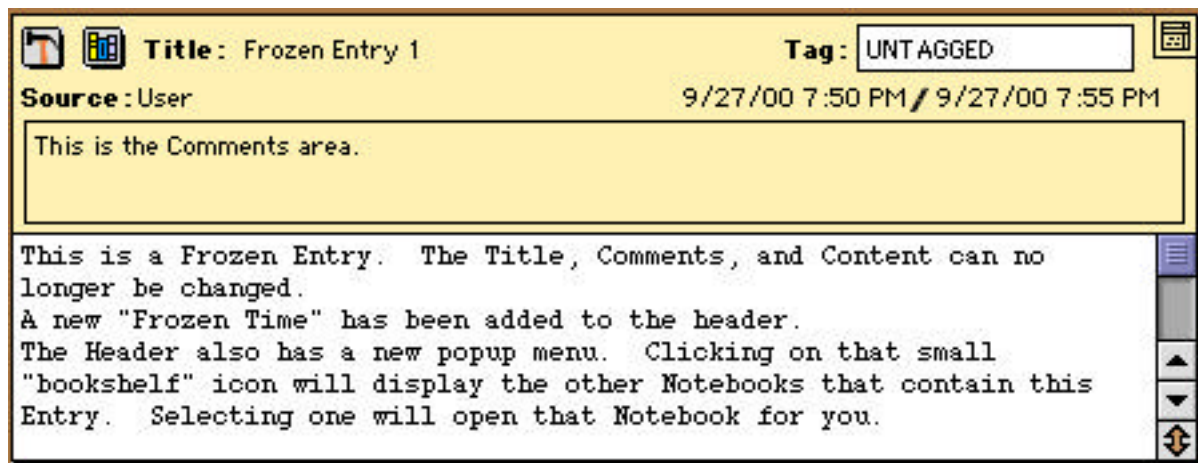
Figure 6. What A Frozen Entry Looks Like

After an Entry is Frozen, the Title and Comments become unchangeable read-only fields. The Tag can still be changed, however. The creation Timestamp now has the Timestamp of the moment of Freezing appended to it; this provides the Fluid "lifespan" of the Entry. This is very helpful when later trying to understand the relationships between Entries in a Notebook. Which came first? Did they overlap?

Figure 7. The Notebooks Popup's Small Icon

There is a new small icon just to the right of the tools icon. It is supposed to look like a small bookshelf. Clicking here pops up a menu of the other Notebooks this particular Entry has been Put into; choosing a Notebook from this menu will open it. In a Browser you can drag selections from its list of Notebooks and drop them here to do a very quick Put which avoids the dialog box.

Entries do not need to be permanently Put into any Notebook to be accessed: the Hub can always to be used to search the Archive for them and Put them into a Notebook for display when needed. An Entry may be removed from a notebook using Zap, but it is never destroyed. A copy remains in the Archive and can be Put back into any Notebook at any time.
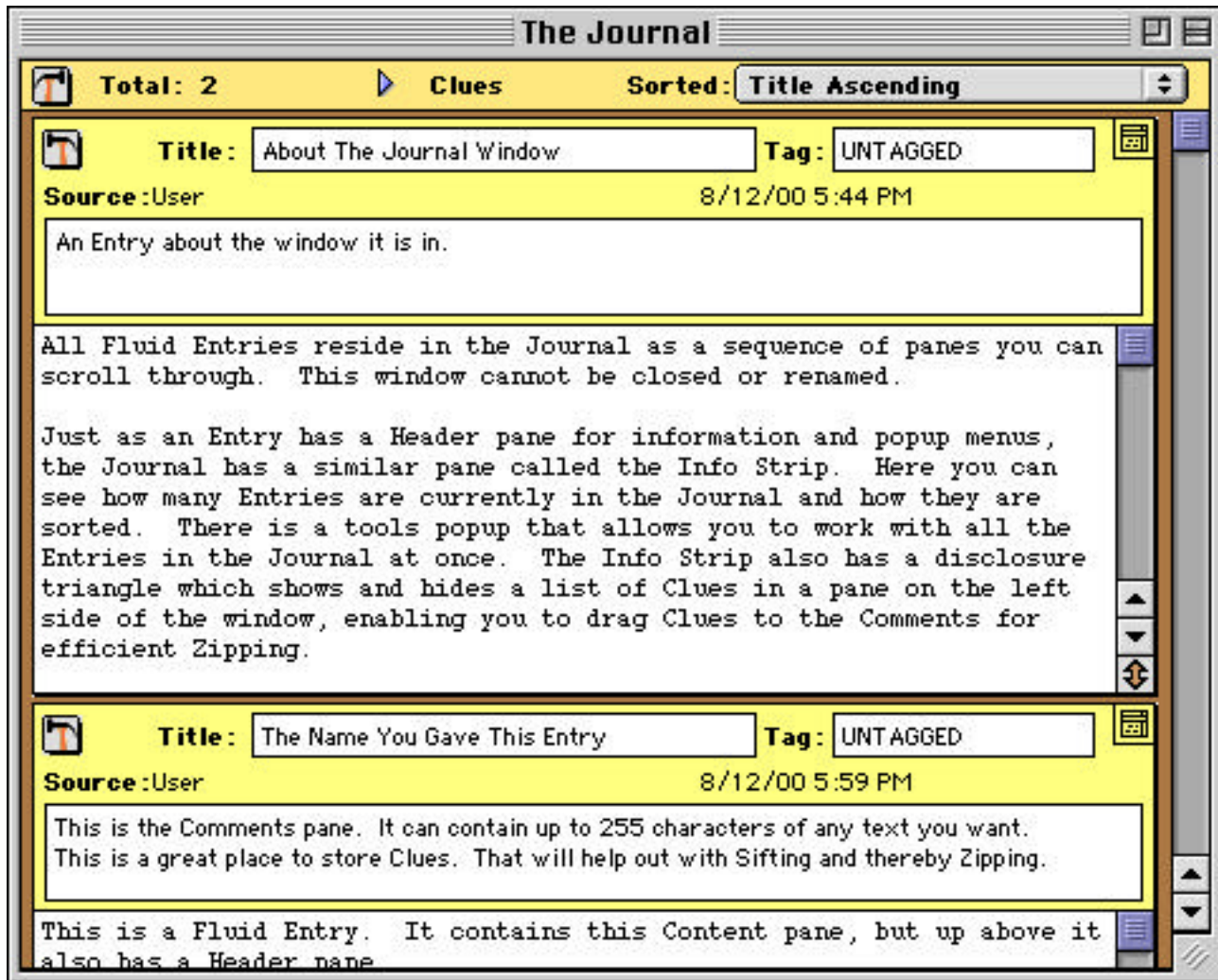
The Journal

Figure 8. What The Journal Window Looks Like

There is only one Journal in a Library. It is intended to be a workplace where thoughts and information are collected before being filed away in the Archive and Notebooks. The Journal is a specialized Notebook into which new Entries can be keyed or Imported, but it should not grow infinitely -- you are expected to Zap or Zip-Zap frequently. Unlike a normal Notebook window, the Journal window cannot be closed nor have its Layout changed. Neither can it contain Frozen Entries: the Journal is the only place Fluid Entries can exist and it contains nothing else.

The Journal acts as a Library's front door because all Entries pass through it. Just as most computer users have only a few files visible in windows at any one time while there are thousands

of unopened files on the hard drive, Boswell users have only a few Fluid Entries in the Journal and many more Frozen ones lying unseen in the Archive.

A process called Tidying ensures that any Fluid Entry remaining in the Journal for more than thirty days is automatically Zip-Zapped.

The Journal window has an "Info Strip" at the top for buttons, popups, and information. It also has a small "disclosure triangle" to show and hide a list of all the Clues. When the list is visible you can drag Clues from it to a Fluid Entry's Comments or Contents rather than typing them out.

Notebooks

A Notebook is a collection of Frozen Entries. It can be grown, shrunk, sorted, and viewed in several different ways.

If some Entries have a useful common feature, they can all reside in the same Notebook. The Entries in a Notebook can be further grouped by common Tags, sorting, or Hub Reformatting with different Entry Formats used for Entries that meet differing criteria.

All Notebooks are considered equal. There is no hierarchy of Notebooks and one Notebook cannot contain another. However, it is expected that you might have prefixes on notebook names so they will sort into groups in the Browser and dialog lists.

The topmost pane in a Notebook window we call the "Info Strip."   It shows how many Entries are in the Notebook, but also gives us a place to locate some popup menus: a tools popup that lets you work on the Entries in that specific Notebook (such as "Zap all the Entries" with only one click on a popup); one that lets you choose which layout, Journal or Browser, the Notebook window will use; another to choose what criteria the Entries will be sorted by. Both Browsers and the Journal window have their own version of this Info Strip.

Notebooks can easily be sorted by a single criteria by using the popup menu in the Info Strip. A Sorting operation can be undone. Using a dialog box, Entries in a Notebook can be sorted by one, two or three criteria from among these: Title, time created, time Frozen, Tag, and Source. You can mix criteria to create a mini-database.

A Notebook window is displayed in one of two Layouts: a scrolling column of Entries like the Journal, or a single Entry with a grid of Entry headers like the Browser window. The first is helpful when you want to see Entries in relation to one another; the second when you wish to quickly find and view a specific Entry.

Because a Notebook can fulfill as many functions as a three ring binder, we expect that you will eventually develop informal classes of Notebooks, such as permanent, semi-permanent, and transitory. The permanent ones are always there -- a Rolodex notebook, for instance, accumulating new Entries for new people or an e-mail Notebook containing every message you have sent or received. These should be seen as categories for future searching rather than something you would open and read. Why would anyone want to read through all of the e-mail they ever received, for instance?

The semi-permanent Notebooks are for topics with a limited lifetime such as projects: e-mail and shopping lists to arrange for Fred's birthday party next week, for instance. Next month you will

have no need of it and the Notebook will be deleted.

The transitory ones are for search results. Use the Hub to Put Entries meeting various criteria into them for filtering and perusal. They are intended to be opened and read. New transitory Notebooks can be created for each search and then deleted when no longer needed. Alternatively, you can keep around a few "scratch" Notebooks which are emptied and then refilled by a Hub Put. These "Work In Progress" Notebooks might stick around for a long time but have their Entries change frequently as you do revision after revision.
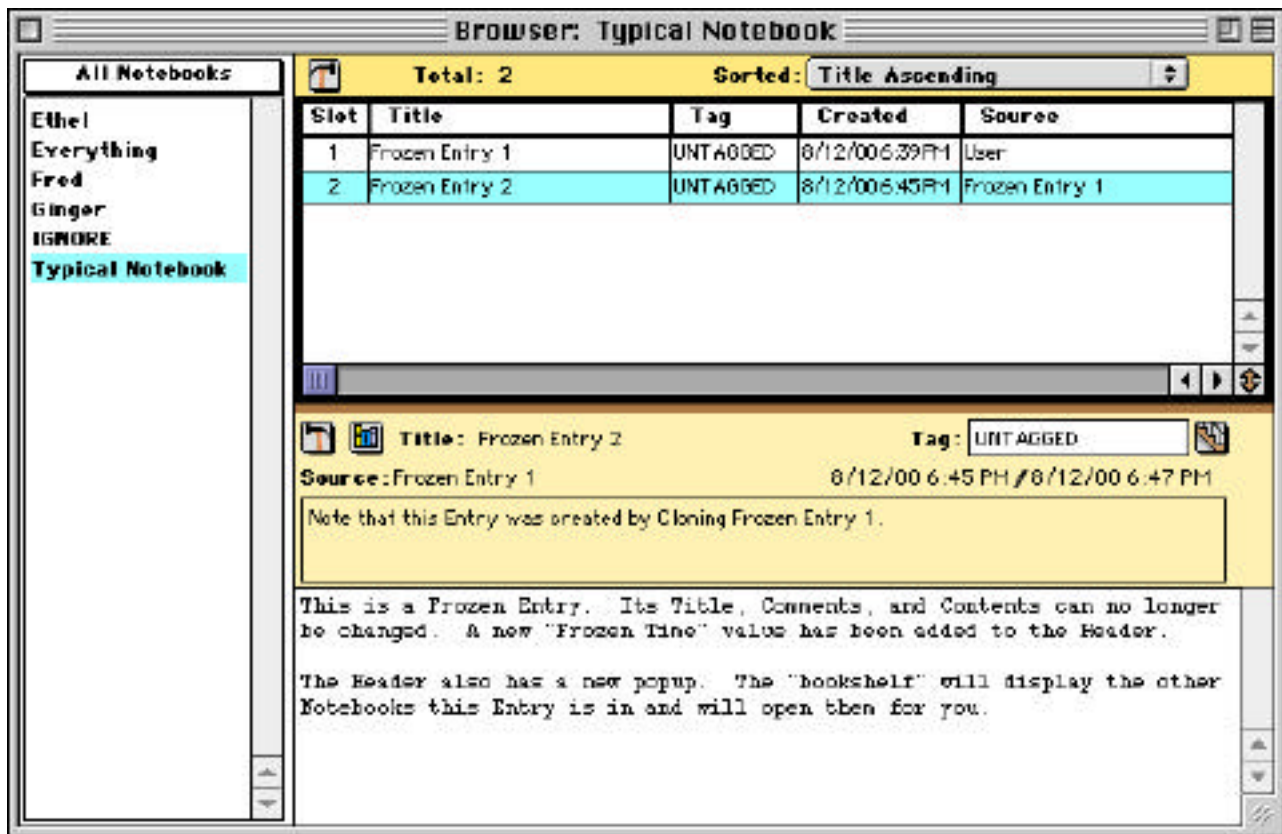
Browser Windows

Figure 9. What The Browser Window Looks Like

Browser windows allow you to see any Entry in any Notebook with just two double-clicks. You select a Notebook from a list of all the Notebooks in the Library, then select an Entry in the "Header grid" pane. Just as in a Notebook window seen in Browser layout, the "Header grid" can be re-sorted.

Multiple browsers can be open at one time. If you select a Notebook in the list which already has a window open, either a Notebook window or another Browser, that window is brought to the front.

You can do a quick Put by selecting one or more Notebooks in the list and "drag and dropping" them onto the small button that looks like a shelf of notebooks in the Header of the currently displayed Entry. It is much easier than using the Hub or a menu choice and dialog.

Figure 10. The History Popup's Small Icon

Now where were you? Everyone wonders that once in a while. Boswell users have the History popup to provide an answer. It shows the last twenty Entries that have been displayed in a Browser window. Choosing one of the items will re-display that Entry. The small icon is supposed to look like stairs and a bannister.

Putting

Put adds an Entry to one or more Notebooks. Putting an Entry is like distributing a financial transaction to several ledgers or making several photocopies of a page and placing them in different file folders. In Boswell, it means making a copy of an Entry into one or many Notebooks. You can either do this for a single Entry from a tools popup menu in the Entry Header which will display the Put dialog box, or use the Hub dialog window to operate on a group of Entries that meet specified criteria. When it is displayed in a Browser window, drag-and-drop can be used to Put an Entry in other Notebooks.

Frozen Entries which have already been Put into some notebooks can be Put into even more Notebooks. If you try to Put an Entry into a Notebook that already contains it, nothing happens. Boswell checks to make sure no Entry is Put twice in the same Notebook so it will not be cluttered with duplicates.

Zapping

Zap removes Entries from the Journal and Notebooks.   If a Fluid Journal Entry is Zapped, it will be Frozen as well. Zapping can be done for just a single Entry by using a popup menu and on many Entries using the Hub dialog. Using the Hub dialog, you can "filter" the Entries in a Notebook again and again. When doing a search of the Archive, you would probably first fill a scratch Notebook with every Entry that could possibly be interesting (which is somewhat the way current Internet searches work) and then Zap all those that meet uninteresting criteria until you get exactly the result you want.

Zap may remove an Entry from a Notebook, but it does not destroy it. A copy always remains in the Archive and can be Put back in the Notebook at any time.

Cloning

Cloning is triggered from the Tools popup of a "parent" Entry. It creates a new Fluid Entry in the Journal whose contents starts out as a copy of the original Entry. If a Frozen Entry is Cloned, this makes its text available for modification; if a Fluid Entry is Cloned, this provides "new version" functionality.

You are urged to keep a small Notebook or two of "template" Entries which are born to be Cloned. They serve as reusable "forms" much as pre-printed phone message pads and letterhead stationery

do. When you Clone them, their "fields" are filled in using arrow key navigation between embedded tabs. They are great for making mini-databases like a personal address book. A few examples for phone messages and people are included in our documentation library.

Cloning is not to be confused with Versionize, which can only be done on Fluid Entries.

Versionizing

Versionize preserves the state of a Fluid Entry by making a Frozen copy of it in the Archive. It is an easy way to do what is essentially a Zip-Zap followed by a Clone. This means that when you Versionize a Fluid Entry in the Journal notice little visual change (the Source may be different), but have easily preserved a "snapshot" of the current state of an evolving Entry that may prove useful as a historical document -- or invaluable in the event of a power failure.

In a more conventional Mac application, something like this might be done using a "Save A Copy As" menu choice.

Frozen Entries cannot be Versionized, but they can be Cloned instead. Both actions result in a new Fluid Entry containing a copy of the contents of the "parent" Entry. Frankly, we are providing Fluid Entry Cloning for the sake of completeness and expect you would almost always prefer to do a Versionize on a Fluid Entry.

Put-Zap

This Puts an Entry in some Notebooks and then Zaps the original. This is the only way to manually Put a Fluid Entry from the Journal.

Sifting

Sifting is an analysis of the text in an Entry's content and header fields to see what Clues it contains. Sifting is not an action which you explicitly trigger, but happens automatically when Putting or Zipping. Notebook names are automatically considered Clues. The Notebooks that match the found Clues are displayed by the Put dialog box in the list of destination Notebooks. This speeds up the Put process for the you: most times these are all the destinations you intend. You can accept or modify this list when Putting manually. Zip uses it as a complete and correct list of destinations.

As you build up a personal collection of Clues, Sifting becomes more and more accurate. We expect that you will eventually simply Zip most Entries rather than using the Put dialog box.

Clues

Clues are character strings associated with specific Notebooks. A Notebook's name is automatically considered a Clue for that Notebook. When a Clue is encountered in an Entry's header or content text during Sifting, the Notebooks associated with that Clue are added to the suggested Put list.

A Clue is case sensitive, and is not delimited by spaces or tabs; it may contain any printable characters. For instance, the Clue "swell" would be found in an Entry that contained only the word "Boswell" as well as in an Entry that contained "You're swell."
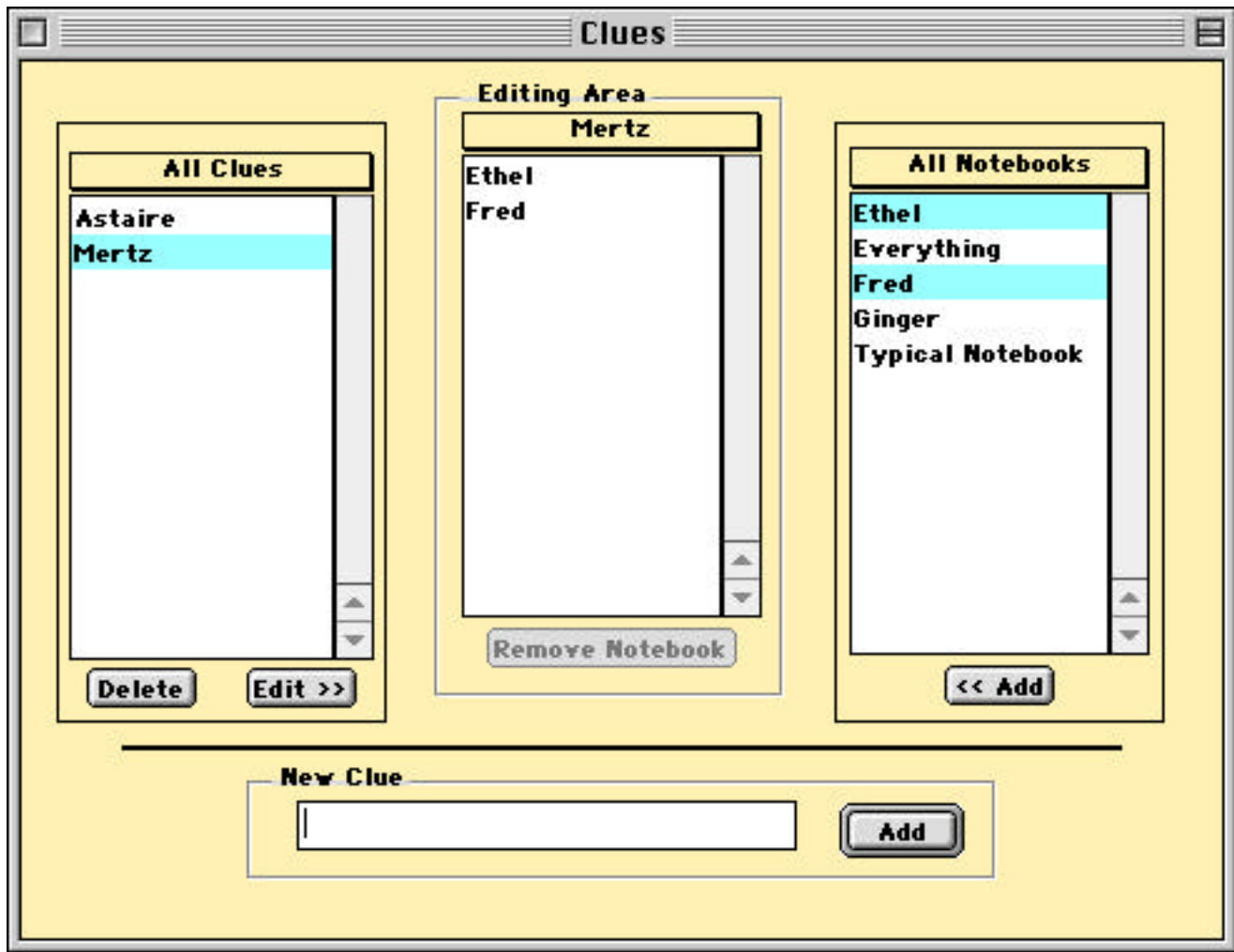
Figure 11. What The Clues Dialog Window Looks Like

You need the ability to create Clues and associate them with Notebooks. This led to the creation of an odd-looking dialog window. The existing Clues are listed in a pane on the left and an area for creating new ones is at the bottom. A list of all Notebooks is on the right. The editing area is in the middle. This is where all the work gets done. Buttons are used to select a Clue for editing and then other buttons are used to create a list of Notebooks the Clue will be associated with.

For example, this allows you to associate the Clue "Mertz" with the two Notebooks for Fred and Ethel so that any Entry containing the character string "Mertz" can be Zipped to both of those Notebooks.

Boswell is a fairly complete tool for managing information; Clues make it an efficient one. After all, current products can be made to do much of what Boswell does, but with you doing a great deal of "bookkeeping." Worse, decisions about categories must usually be made **before** the product can be used. Boswell allows you to enhance it as your familiarity with the product and your information grows.

We expect that you will probably start off in Boswell as you might in, say, a database program: by manually Putting Fluid Journal Entries into their Notebooks. Soon you will see that the Notebook

names Sifting discovers in the Entries gives you a very usable list of target Notebooks. You may start to create your own obvious Clues for variant forms of words so that, for instance, Entries containing "military" and "armies" will be Zipped to the "army" Notebook. For simple, repetitive items (another e-mail from Fred about the Harris project, for instance) you may start to trust to simple unique Clues (such as "F+H" or "H_F" in this example) which are most unlikely to occur in ordinary text. These Clues are then keyed or dragged into the Comments field and the Entry can be easily Zipped into the desired Notebooks.

To make this easier, the Journal window has a list of Clues on its left side which you can show or hide as you wish. Rather than typing Clues (or, worse, mistyping them), single or multiple items can be selected from this list to be drag-and-dropped to the contents or Comments where they will appear as if they had been typed. You can show or hide the list whenever you wish using a disclosure triangle in the Journal window's Info Strip.

Once you have created a sizeable list of Clues, it is expected that sticking Clues in the Comments field will become second nature to you and you will rarely Put Fluid Entries again. Zip-Zap will become your preferred way of dealing with Fluid Journal Entries and Put will now be done mostly in the Hub when seeking a subset of the Archive that matches specific criteria.

Zipping

Zipping Puts Entries in Notebooks without displaying a dialog box: it simply assumes Notebook choices made by Sifting are correct. After some learning experiences and the creation of usable Clues, it is expected that Zipping will be the most frequently used Put procedure. You can choose to do this manually for individual Entries or use the Hub to operate on groups of Entries. While Frozen Entries can be Zipped, it is expected that you will rarely do so. It is primarily a tool for Fluid Entries.

Zip-Zapping

Zip-Zapping Zips an Entry using the choices made by Sifting and then Zaps the original Entry. Once you have created a sufficient number of Notebooks and Clues, Zip-Zap is a great way to take care of Journal Entries: with just one menu click, an Entry is Frozen, Put into the most likely Notebooks, and Zapped from the Journal itself. We believe that is how you will come to usually handle your Fluid Entries. You can even set a "maximum lifespan" for Fluid Entries via the Preferences Dialog and a process called Tidying will automatically Zip-Zap them when the time comes.

The Archive

This is the largest component of the Library: a chronological collection of all Frozen Entries. It is a series of files of reasonable size (currently no more than one megabyte) called Log files (or just Logs) which you treat as a single entity. You cannot directly view the entire contents of the Archive any more than you can simultaneously open all the files on your hard drive, but it can be used in the Hub as the source for Entries to be Put in Notebooks. This way you can be certain that your search did not overlook any possible matching Entries.

Not all Frozen Entries reside in Notebooks, nor do they need to, but all can be found in the Archive.

The Library

The Library is everything, the whole magilla -- a freeform data base of the Journal, Entries, Log files, and Notebooks. It is hard for us to imagine you wanting more than one, but we do leave that possibility open because the Mac's document paradigm demands it. Having only one frees you from having to decide which Library should contain a specific new Entry and later searching through several Libraries to find it again. A starter documentation Library is included with Boswell. Once you have become familiar with the product, we think it wise for you to simply build upon it rather than starting your own Library from scratch. That way detailed documentation is always available to you in future.

Boswell Files And Folders Organization

    Library_Name folder -- contains the entire library
        Library_Name archives -- a folder which contains all the Log files
            Library_Name_000001
            Library_Name_000002
            Library_Name_000003
            etc.
        Library_Name
            the library file that you open to start work
            it contains the Journal and Notebooks

The Hub

A "control center" dialog window, the Hub enables you to manipulate many Entries and Notebooks by building up a sentence-like instruction in the form of "Do this action for Entries currently in these Notebooks which meet these criteria." Setting some items in the dialog can disable other items, so you stand little chance of generating nonsensical commands. This is a powerful way to gather and filter Entries, but popup menus and drag-and-drop make it surprisingly easy to work with.
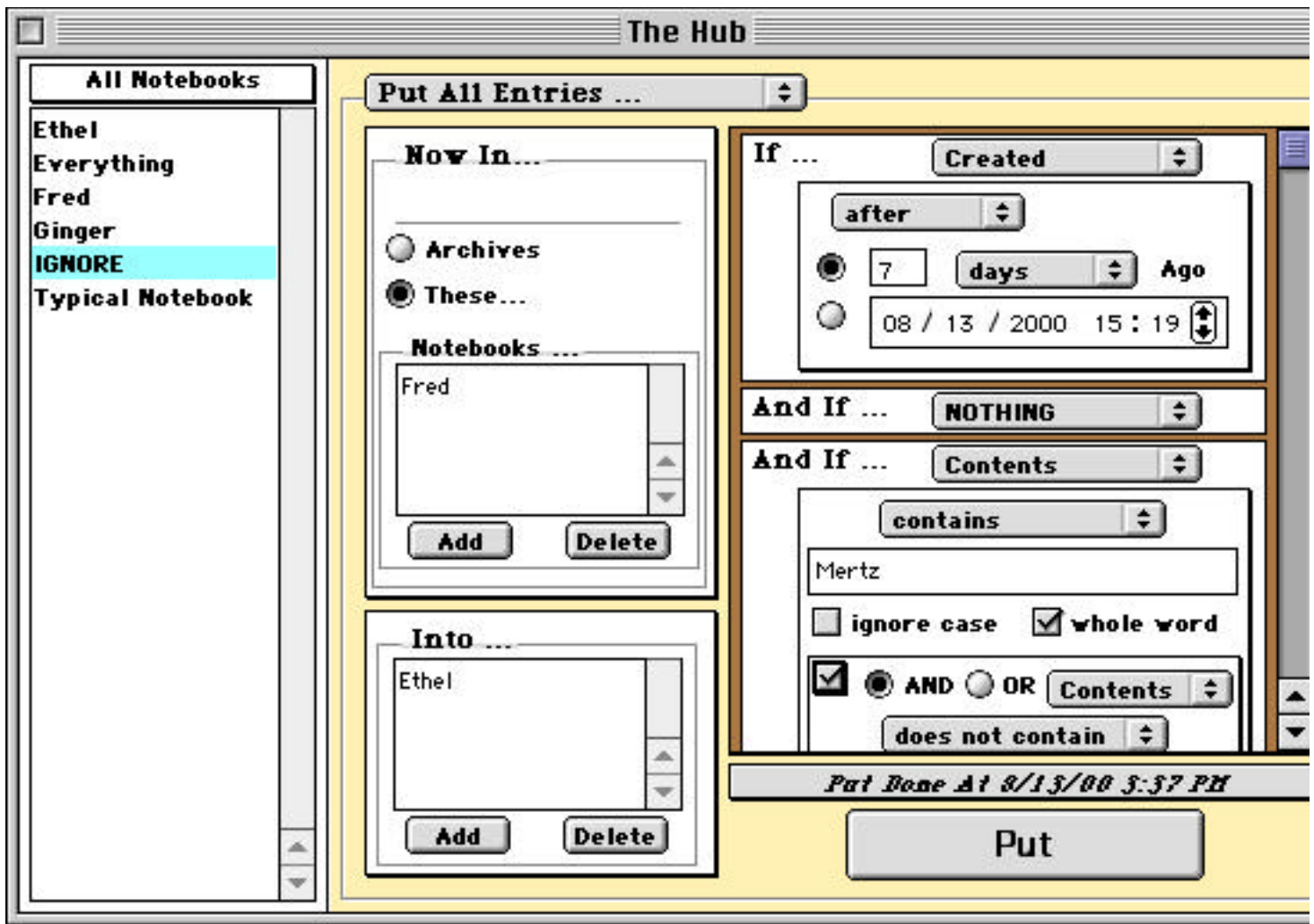

Figure 12. What The Hub Dialog Window Looks Like

The Hub works on groups of Entries which meet user-chosen criteria rather than a specific Notebook. These Entries can exist in many Notebooks or only in the Archive. While the Hub can be used to give these Entries a common Format or Tag, it will be used most often for gathering Entries which fit a variety of criteria into a Notebook devoted to query results. We envision that a specific target Notebook would be emptied, all possible Entries of interest would be Put into it, and then the target would be filtered again and again by Zapping Entries that meet specific criteria which are not of interest.

Figure 13. Typical Hub Dialog Conditions

It sounds involved at first, but we expect it will soon become second nature to you. The learning curve is offset by the ability to make queries that would have been inconceivable before Boswell like: show me all the e-mail I wrote to Harry in the last year where I mentioned the Johnson project, used the word "deadline" and did not send a copy to Fred; or list all my expenses for last June that contain "Restaurant X" and "Phillips" but not are not in the Johnson project expenses Notebook; or find every newspaper article I saved in the last six months that contains both "Rockwell" and "Space Station" but was not forwarded by e-mail to George.

These queries are much more like the way people think than the stiff format of databases or Internet search engines. In fact, we think the Hub to be so useful we expect that you will have that window open all the time.

Dragging And Dropping

While using The Mac's ability to "drag and drop" data makes Boswell much more efficient than it would be otherwise, how to use it is not as obvious as, say, menus. While the cursor changing to look like an open hand is a strong hint, it is not as explicit as words. A little experimentation with the various lists may be a good idea.

In the Journal window, you can drag Clues from the list and drop them in an Entry's Comments where they will appear as if the words were typed out. In a Browser window, Notebooks can be dragged from the list and dropped on an Entry's "bookshelf" small icon to do a quick Put of a single Entry to multiple Notebooks. Entries can also be selected in the header grid and dragged to the list of Notebooks: when they are dropped, all those Entries will be Put in all the selected Notebooks.

In dialogs like the Hub and Clues, Notebooks selected from the list of all the Notebooks can be dropped into the smaller lists of selected Notebooks rather than using the "add" buttons

Exporting

Exporting uses an Entry or a Notebook to create a text file that can be used by other applications, such as word processors. It is very handy when using Boswell to create rough drafts of documents that will be polished in a word processor. Individual Entries can quickly be re-ordered in a Notebook by changing the Tag fields and sorting on that.

When Boswell is used to archive e-mail messages, Exporting can be used to create one long text file consisting of the text of many previous e-mail messages about a particular topic in chronological order. This can be helpful when bringing a newcomer up to speed on a project that has been underway for a while.

Importing

Importing turns text files into Entries. Files can be Imported one-by-one or you can choose to Import all the text files in a folder at one time.

Newly Imported Entries appear in the Journal with the file name as the Entry's title and "parent_folder_name:file_name" as the Source. They are Fluid which allows you to add Clues to the Comments to help in Zipping.

Importing all the text files in a folder is very handy for use with e-mail applications that can save messages as text files. Because Sifting looks at the Source field, a Notebook with the same name as the folder can have all Entries ever Imported from that folder automatically Zipped to it.

Auto-Saving

Auto-Saving automatically preserves the state of the Library on disk without bothering you with a

dialog window. It happens at user-specified intervals (set in the Preferences dialog) which can be expressed as amounts of time, or Entries, or both. You can even set it up so that every new Entry generates a save.

Tidying

Tidying is not a menu choice anywhere, but an automatic Zip-Zapping of Journal Entries which have remained Fluid beyond a user-specified time limit of between one and thirty days. It keeps the Journal small and manageable. The time limit is specified in the Preferences dialog box.
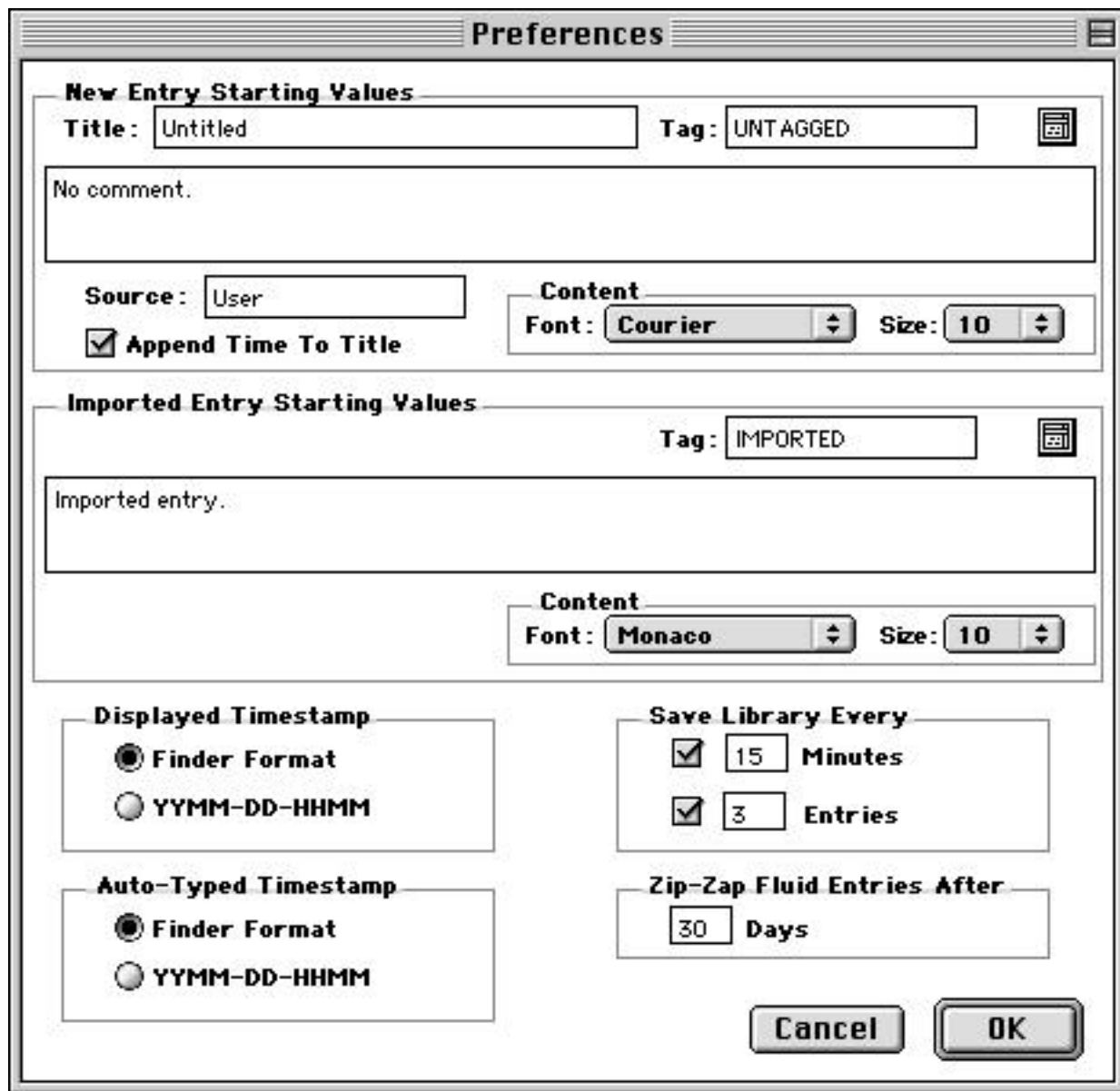
Preferences

Figure 13. What The Preferences Dialog Box Looks Like

As you can see, Boswell allows you to set a bunch of default values.

Some Frequently Asked Questions

What Do I Do With The Library That Comes With Boswell?

Make a copy and build on it. It contains all the Boswell documentation, much more than is in this manual, so it will be very handy to have around in future if you ever have a question. Rather than start your own Library from scratch, just add Entries to this one.

How Would Boswell Be Used To Write A Long Document?

We expect that if you are working on something fairly long, say a thesis, you would proceed like this:

> - Create individual Fluid Entries in the Journal for sections;
> - Polish and Versionize each Entry until it is finished;
> - Put all the finished Entries into a Notebook devoted only to that thesis;
> - Use sequential values in the Tag field to sort the thesis Notebook;
> - Export the Notebook as a text file;
> - Use a word processor to clean up the file before printing it.

What Are Boswell's Mac Interface Extensions and Departures?

Because Boswell is unlike other Mac applications, we have had to stretch and bend the Mac interface conventions in places.

While these departures make it easier for you to get work accomplished in Boswell, you also have to spend time getting used to a slightly different way of working. Mac applications were originally intended for a world of word processors that worked on individual files, copying and pasting text between them. Spreadsheets and drawing programs have the same attitude: the application is a bunch of tools that operate on a document. Boswell is different; more like an operating system or a database; an environment rather than a traditional application.

You cannot see all your Entries at one time any more than you can open all the files on your disk at once; Boswell parcels Entries out to you as requested. Notebooks, for instance, are not files nestled in folders, but simply selectable items in a list; themselves only a list of Entry references. They can be printed out, but they are more a database report than the usual Mac document. Entries are not paragraphs in a document; they themselves cannot be copied and pasted although the text they contain can be.

The usual Mac File and Edit menus are not quite what folks are used to. They cannot discard their changes with a "revert to saved" command. "Save" now Saves a state, not a document. Copy, cut, and paste still apply to text, but not to Entries as a whole.

Rather than inflict an overwhelming number of menu choices and dialog boxes on you in order not to violate the Macintosh user interface's "first select the noun and then select the verb" paradigm, Boswell takes the liberty of providing you with a "Hub" modeless dialog. This allows you to pick nouns and verbs simultaneously by setting controls to form an instruction that comes close to

looking like an English sentence and then clicking a button to direct that the instruction be executed.

Also, you quit Boswell and then start it up at a later time with all the window and scrolling positions preserved the way the Finder does it instead of you having to re-create them on each start-up the way most multi-window applications do.

Where Is The Hierarchy?

Yes, we have no hierarchy: one Notebook cannot contain another; all Notebooks are considered equal. We know you may already be comfortable with outliners and hierarchical file systems, so why are we doing something so different? Because the problem with a hierarchy is deciding where something should go.

A designation that makes perfect sense at the time seems awfully stupid when you try to find something later. If something is interesting enough to be worth preserving, it is usually because it says something about A in relation to B, if not C, D, and so on. "A" may seem the most important aspect when you store it, but not later when you are looking for things that relate to "B." With Boswell you can store it away under every category you can think of. We feel the extra effort required to become accustomed to our paradigm will pay off in increased efficiency just as learning about word processors has paid off for typists.

Why All That Unnecessary Capitalization?

When our specialized terms are used here in a Boswell-specific context, they are capitalized for the sake of clarity. You should be able to look up their definition in our glossary. Capitalization is used rather than italics or some other style signal because the signal value will be retained in simple text files -- like e-mail messages.

Why Call The Product Boswell?

It's a tribute to James Boswell, the great Dr. Samuel Johnson's faithful friend and chronicler who was such a good biographer that "Boswell" has come to mean the detailed recorder of a person's life.

Boswell is also much easier to remember and spell than "Amanuensis."

Why Can't I Do This In A Database?

If you are already an expert using an extremely capable database package, you may well be able to do much of what Boswell does. We doubt you could do it quickly, however. We also think you would have problems implementing Sifting or adding a new Notebook. You could surely generate a search result, but you might have trouble sorting or editing it. The RAM and disk requirements would not be trivial; and a large number of Entries might degrade your performance significantly.

For ordinary consumers, the results would not justify the effort. Besides, the information they have is not as structured as that of the large corporations who started database programming in the first place.

Won't My Hard Disk Overflow?

We have heard this one far too often. Every time we explained Boswell to people, we consistently got the reaction, "Why would I want to keep stuff around that I can't throw away and can't change. Won't my hard disk fill up?" Here's our more restrained reply.

If you typed at a speed of fifty words a minute with eight characters in a word for forty hours a week, fifty weeks a year (no holidays off, but you get a vacation) from age 20 to age 65, you would generate approximately two gigabytes of text and be in a terrible mood. Ten years ago 20 megabytes was a reasonable size for a hard drive. Now we have floppies that exceed a gigabyte and hard drives that exceed fourteen. A 35 gigabyte drive has been announced. The latest Mac has a 100 gigabyte capability. We live in a world where storage capacity increases faster than people can type. We are not worried; you should not be either.

And if you have all that capacity, why bother to throw anything away? If you do discard it, you know the chances are that you will soon be searching for it. If you have ever dutifully cleaned out a closet or a garage, we bet you threw out something you needed just a few weeks later. It seems to be a law of nature.

Bytes, after all, hardly take up physical space or weigh anything: today's four gigabyte drive is smaller and lighter than the twenty megabyte drive of ten years ago. The two megabyte drive of 20 years ago was as large as half a refrigerator.

As for not being able to change archived material, who needs to change their old e-mail? What percentage of the text files now on your hard drive do you ever expect to change? And of those, how many are you completely uninterested in having a previous version of? We figure there are very, very few.

Technology has given you the ability to be a data glutton to an extent undreamed of by the great minds of human history. Why not put your feet up and enjoy it?

Are Four Thousand Notebooks Really Enough?

Four thousand binders one inch in thickness and one foot high in bookcases three feet wide and eight feet high would require sixteen bookcases. These would completely line a twelve foot by twelve foot room. So the answer is "Yes."

How Do The Journal, Entries, The Archive, and Notebooks Interact?

You make Entries into your Journal. The Entry has a Header area for such things as the Title and time of creation and a scrolling text editing pane where keying is done or text is pasted in. These Entries are easy to start (hitting command-E will suffice) and it is expected that you will make many small ones. Entries can be made from the contents of Imported text files such as e-mail messages. It is probable that most of what a you write and much of what a you read will be a Journal Entry at some point.

When it is convenient, these Fluid Entries are Zapped from the Journal, placed in the Archive where they will remain forever. We call this "Freezing." Entries are usually Put in various Notebooks as well. Put (the Boswell equivalent of photocopying a paper note so each of several folders can have a copy) can be done manually or automatically "Zipped". Both versions benefit

from "Sifting" where the Entry's text is searched for user-specified "Clues" associated with specific Notebooks. You get a very usable list of possibilities before making the final decision on the Entry's Put destinations. "Zip" simply assumes these values are correct and Puts the Entry without bothering you with a dialog window.

Once an Entry has been Frozen it can be Cloned and Exported, but it cannot be changed. The Journal is intended for your recent Fluid Entries while Notebooks show Frozen Entries grouped by topic. The Archive provides storage for all of your Frozen Entries; the Journal, all Fluid Entries. Both Notebook types (Notebooks and the Journal) can easily be sorted by several criteria and searched for specific text strings. Entries can be Exported as text files and thereby serve as rough drafts for conventional word processing documents.

When you feel that the Journal is getting too cluttered with old Entries, it can be cleaned up manually or automatically. This involves moving the older Entries to the Archive, doing a Zip on them, and Zapping them from the Journal. We have a verb for this called "Zip-Zap" where the two actions are combined. Tidying is an automatic Zip-Zapping of Fluid Entries which have exceeded a user-specified "lifespan."

The Archive provides a permanent, chronological record of a your work and is very valuable for preservation and auditing purposes.

What Is "Slot" Sort Order?

Suppose you have a Notebook with its Entries sorted by Tags. Further suppose that you then change one or a bunch of those Tags. Where has the sort order gone? Out the window, that's where.

If we re-sorted such a Notebook every time one of its Tags changed, the Entry you are typing in at the time might well be sorted out of sight. The least confusing thing to do is leave the Entry order unchanged but change the popup to reflect the new status.

"Slot" seemed a better choice than "Position" (they are ALWAYS sorted by position) or "Unsorted" (most of them are still in Tag order), but we are open to suggestions.

How Do I Get My Old E-Mail Into Boswell?

Tools will be provided for the major e-mail products. Running the one that matches yours produces a folder full of other folders, one for each month. This can take quite a while, depending on how many messages you have accumulated, so you might want to run it while you are off having lunch. You might want to play safe and back up all these new folders to another hard drive or whatever removable media you use.

Once that is done, you had best start off by emptying your Journal and then creating all the Notebooks and Clues you can think of.

If you have a great many old messages and Notebooks you want to contain them, you might want to consider preparing Boswell for the big task that awaits it. It is some extra work, but you need only do it once. Quit Boswell and your other open applications and then select the Boswell application file in the Finder. Now use the Get Info item in the Finder's File menu to give Boswell all the memory you can. Don't worry -- you will be reducing that number once all your old e-mail

is in your Library. This is just a precaution. Choose the About This Computer item under the Apple menu so you can see how your memory is being used and start up Boswell again. Notice that Boswell is using little of the memory you have given it.

Now open your Library. Using the Import Entire Folder item in File menu you can Import all the files in that first folder of old e-mail all at once. You may have enough messages that this will take some time. The changing memory indicator in the Get Info window should reassure you that Boswell really is working away. When that finishes you should have a Journal filled with Entries. The creation time for each will be pretty much the same, but the Titles will start with the message's original time and the Source will begin with a folder name specifying the original month. This will be very handy later when you are searching for old e-mail Entries by time or you want to sort a Notebook full of them in chronological order.

Now go to the tools popup in the Journal Info Strip and choose "Zip-Zap All." Again, Boswell will grind away and that memory indicator in the Get Info window will move around a bit. When it completes, play safe and save your Library.

Now you have to repeat the process for each monthly folder of old e-mail. If your old e-mail goes back a long way, this could prove tedious, but having all those messages available in Boswell will be worth it. Keep an eye on that memory indicator. If it gets close to the limit, quit Boswell, give it some more memory, and then pick up where you left off.

When you have finished Importing all the files and all the Entries have been Zip-Zapped into Notebooks, take a close look at that memory indicator again. It reflects the amount of memory Boswell will need in future to manage your enlarged Library. Just as an example, let's say you gave Boswell 20 megabytes and it is now using about a third of that space. That is about 7 megabytes. Quit Boswell and go into the Get Info window again. Reset Boswell's memory allocation to what it was using plus another megabyte or so for future expansion. In this case, that would be 7 or 8 megabytes.

And after all this, you finally have a Library filled with all your old e-mail messages; they are grouped together in Notebooks and can all be searched in future using the Hub.

What Is The Really Cool Stuff?

Obviously, the ability to select Entries in the Hub using so many criteria is pretty powerful, but we are very fond of auto-saving and drag-and-drop.

If you are going to put so much of your data into Boswell, it is nice to know that you will not lose big chunks of it should there be a power failure. With auto-save you can preserve your library on disk as frequently as every time you start a new Entry. You can also trigger it by time. Just set the values in the Preferences dialog box and stop worrying.

There is also Boswell's Undo capability which allows you to experiment or err and escape disaster.

Drag-and-drop is handy in the Hub when you are specifying Notebooks, but we get a big, big kick out of using it in a Browser window. Just drag one or several Notebooks from the list to that little icon of a bookshelf to Put the currently displayed Entry into them without having to go through a dialog box. You can click on that small icon to verify that the Puts took place. You can select multiple Entries in the header grid and drag them to the Notebooks list to Put the Entries into the

selected Notebooks. It also works when you drag Notebooks to the selected Entries in the header grid. It even works when there are two Browser windows open: you can drag Notebooks from one to Entries in the other.

Limitations

When a Fluid Entry is Put, Zipped, or Zapped, it is Frozen and moved into the Archive. This action cannot be undone; the Entry can never be made Fluid again. Once it is Frozen, it stays Frozen. Our feeling is that you would so rarely want to "thaw" an Entry that we need not worry about it. Even then, you can Clone the Frozen Entry to create a Fluid Entry you can alter. Maintaining the unalterable state of a Frozen Entry (which many would want for convenience and legal reasons) is more important. Currently, most files on a your hard drive rarely change and for those that do, it's usually helpful to save away a previous version for safety and inspiration.

These are Boswell's other limitations:

*   One million Entries maximum.

*   Four thousand Notebooks maximum.

*   32,000 characters of text maximum in an Entry's content.

*   254 characters of text maximum in an Entry's Comment field.

*   32 characters of text maximum in an Entry's Title field.

*   32 characters of text maximum in an Entry's Source field.

*   16 characters of text maximum in an Entry's Tag field.

*   32 characters of text maximum in a Notebook's name.

*   30 day maximum Fluid Entry lifespan.

Installation

Before installing Boswell, we urge you to use the Apple menu to make two quick checks to your system control panels. First, go into the "Date & Time" control panel and make sure the time, date, time zone, and daylight savings time settings are all correct. Because Boswell can get this information from nowhere else but the system, it must assume the values are correct. Second, use the "Memory" control panel to set the size of the disk cache to at least 512 kilobytes. Boswell makes extensive use of this memory and will be very slow if the size is set too low. A higher setting, if you can manage it, is just dandy and Boswell will find it a big help.

There are installation instructions on the CD but the process is quite simple.

The Boswell CD contains a folder called "Boswell_folder" which you should drag to your hard drive. Open it.

The folder contains a copy of the Boswell application as well as a library named "Boswell_Library," a Read_Me document, and a copy of the demo library in the form of a text file which you should be able to open from within most any word processor.

Double-click on the Boswell_Library. This will start Boswell running and give you some data to work with. The data happens to be detailed Boswell documentation so you can get up to speed on the product while investigating it. We suggest you make an alias to this file which you can move to your desktop for easy double-clicking.

When it comes time to dispose of Boswell, just drag the Boswell folder to the trash. We do not touch your system folder in any way so you do not have to worry about messing it up.

Getting Started

The Boswell_Library already contains more than a hundred Entries documenting the Boswell product itself. The Journal and a few Notebooks like "overview" and "glossary" should be open when you begin. If not, they are the ones to start with. These will introduce you to Boswell's terminology and concepts.

Every Notebook window except the Journal window can be viewed in either of two layouts which are named for the window types they resemble: Journal and Browser. The Journal Layout has Entries scrolling by like pages in a word processing document so you can compare several Entries at one glance; the Browser Layout has a grid of Entry headers and displays a single full Entry so you can quickly look at individual Entries

We suggest you set the "overview" Notebook's window Layout to Journal using the popup menu in that window's Info Strip (that area at the top of a Notebook window where we stuff controls and information) and read sequentially through its Entries. Keep the "glossary" Notebook window in Browser layout and refer to it for terms that are unfamiliar to you.

Open a Browser window so you can easily check out anything else that catches your fancy. It allows you to look at any Entry in any Notebook with just two double-clicks and some scrolling. The "scenarios" Notebook is a good place for further exploring: it is our attempt to show how people would use Boswell in real-world situations. We also have a FAQ ("Frequently Asked Questions") Notebook you may find helpful.

The Entries already in the Library were created by Importing some text files, adding Comments, and Zip-Zapping them out of the Journal into Notebooks we had previously created. We tried to have a Notebook for every feature of Boswell so you could use them to investigate our product.

The Hub is the heart of Boswell. It allows you to copy Entries from Notebook to Notebook using every criterion we could think of. This is quite powerful, but you need not be afraid to use it in case you mess things up. All the nifty stuff you can do in the Hub is undoable, so feel free to play around with it.

If you are interested in a topic and there is no Notebook for it, we suggest you try creating a new one.   Use the Hub to Put into it all the Entries in the Archive that contain the topic as a phrase so you can browse the results. Any Entries that you feel do not belong can be Zapped.

Use "New Entry" to manipulate some information for yourself. We have included a small suggested "tasks" Notebook to give you some ideas. The empty "Scratch" Notebook is a handy place to view search results. There's also a "Templates" Notebook containing Entries you might want to play around with using Cloning.

Some Final Words

Boswell is very capable, but that comes at the expense of complications hidden beneath its surface. As in any human activity on this scale there are bound to be oversights, miscommunications, and unanticipated dependencies. We in the software biz call them bugs. Should you encounter any, please let us know so we can fix them. We have included a bug report template to make it easier for you. Just fill it in and e-mail it to bugs@copernican-tech.com.

Many thanks and happy Boswelling.

Glossary

Archive : The largest component of the Library; a chronological collection of all Frozen Entries; a series of files of reasonable size (called Log files or just Logs) which you can treat as a single entity.

This is the largest component of the Library: a chronological collection of all Frozen Entries. It is a series of files of reasonable size (currently no more than one megabyte) called Log files (or just Logs) which you can treat as a single entity. You cannot directly view the entire contents of the Archive any more than you can simultaneously open all the files on your hard drive, but it can be used in the Hub as the source for Entries to be Put in Notebooks. This way you can be certain that your search did not overlook any possible matching Entries.

Not all Entries reside in Notebooks, nor do they need to, but all can be found in the Archive.

Auto-Saving: Automatically preserve the state of the Library on disk without bothering you with a dialog. This happens in the background at user-specified intervals (set in the Preferences dialog) which can be expressed as amounts of time, or Entries, or both.

Clone: Create a new Fluid Entry in the Journal whose contents starts off as a copy of the of the "parent" Entry. Not to be confused with Versionize.

Clues: Character strings associated with specific Notebooks. When a Clue is encountered in an Entry's header or content text during Sifting, the Notebooks associated with that Clue are added to the suggested Put list. A Notebook's name is always considered a Clue for that Notebook.

Comments: A text field in an Entry's Header that can hold 255 characters of whatever information about an Entry you wish to Freeze with it. A perfect place to put Clues.

Entry: An item in the Journal and later in the Archive and possibly some Notebooks as well; comparable to a page in a paper notebook. An Entry is not of fixed length, although it is assumed to be short. It has an informational Header as well as a larger content area for text. It is changeable (Fluid) while it is in the Journal but becomes Frozen when it is moved into the Archive and Notebooks.

Entry Header: The top part of an Entry is called the Header. It contains information about the contents as well as some popup menus. The "meta-information" consists of various "fields", or pieces of information about an Entry, including its Title and time of creation among others. These fields are very useful when sorting or searching through Entries in the Archive or Notebooks.

Exporting: Make a copy of an Entry or a Notebook as a Mac text file for use by other applications.

Fluid Entry: An Entry in the Journal. Its text can still be changed. There should be few of these. They can be Versionized. They cannot exist in Notebooks. All Entries, including Imported ones, start out Fluid.

There are four ways to create a Fluid Entry. You can choose "New Entry" from the Manage Menu to start an empty Entry that is ready for keying. The Source will be a signature you can specify in the Preferences dialog. A text file can be "Imported" to create a new Fluid Entry where the contents starts off as a duplicate of the file's text and the Source is the text file name. Similarly an

existing Entry can be Cloned to start a new Entry where the content text is a duplicate of the "parent" Entry's and the Source is that Entry's Title. Lastly, a Fluid Entry can be Versionized. This Zip-Zaps it from the Journal, but then creates a Clone of it in the same place so you notice scarcely any difference because only the Source and creation Timestamp change.

Although Fluid Entries can be Cloned, we are providing this feature simply for the sake of completeness. We expect you would almost always prefer to do a Versionize on a Fluid Entry.

Format: Changes the appearance of an Entry in a Notebook which currently uses the Journal layout. Also known as Reformat. The text can disappear as can the full Header or just the second line of the Header. This can be done on a single Entry by using a popup menu of small icons, or on many Entries using the Hub.

Freezing: Making Fluid Entries unchangeable and adding them to a Log file in the Archive. They will now be called Frozen Entries.

Frozen Entry: An Entry whose text and title can no longer be changed. Freezing places the Entry into the Archive where it will reside forever. All Entries in the Notebooks are Frozen, but not all Frozen Entries are in Notebooks. Frozen Entries can exist in the Archive without being in any notebook. Frozen Entries cannot exist in the Journal. Although unchangeable, Frozen Entries can be Cloned and their text can be copied and pasted.

After an Entry is Frozen, the Title and Comments become unchangeable read-only fields. The Tag of a Frozen Entry in a Notebook can still be changed, however.

Entries do not need to be permanently Put into any Notebook to be accessed: the Hub can always to be used to search the Archive for them and Put them into a Notebook for display when needed. An Entry may be removed from a notebook using Zap, but it is never destroyed. A copy remains in the Archive and can be Put back into any Notebook at any time.

Hub: A dialog window where you perform actions on groups of Entries in the Archive or Notebooks. Entries which meet the selection criteria can be Zapped or Put in other Notebooks. The Entries can also have their Tag and Format changed.

Import: Make Fluid Entries out of the content of ordinary Mac text files; one Entry is created for each file. As well as Importing individual text files, you can Import all the text files in a folder at one time using a single dialog box.

Info Strip: A small area at the top of Notebook windows where the number of Entries and their current sort order is displayed. There is also a tools popup for operating on all the Entries in the Notebook at once. In the Journal there is also a disclosure triangle which hides and shows the Clues panel.

Journal: A specialized Notebook into which new Fluid Entries can be created or Imported. There is only one Journal in a Library, but it should not grow infinitely -- you are expected to Zap or Zip-Zap frequently. Unlike a normal Notebook, the Journal cannot be deleted; its window cannot be closed nor have its Layout changed. Neither can it contain Frozen Entries: the Journal is the only place Fluid Entries can exist and it contains nothing else.

Library: The whole magilla. All the pieces (Notebooks, the Log files of the Archive, and the Journal) that comprise a your Boswell system. Because of the Mac's document paradigm, you can have more than one Library, but why would you want to? Only one Library can be open at one time.

Logs: These are a series of files of reasonable size which taken together comprise the Archive.

Notebook: A collection of Frozen Entries; assumed to share a common topic; a view of a subset of the Archive. The Entries can be sorted by several criteria.

Notebooks: A generic term for Boswell Notebooks that usually means the Journal as well.

Preferences: A dialog where you can set default values and customize Boswell.

Put: Add an Entry to one or more Notebooks. Put can be done on a single Entry by using a popup menu, or on many Entries using the Hub. Entries can also be Put using drag-and-drop. Although the same Entry can be Put in a Notebook many times, there will be only one instance of it there: Boswell checks for duplicates.

Reformat: Also known as Format. Changes the appearance of an Entry in a Notebook which currently uses the Journal layout. The content text can be hidden as can the full Header or just the second line of the Header. This can be done for a single Entry by using a popup menu of small icons, or for many Entries at one time using the Hub.

Sifting: Search the text in an Entry's content and header fields for Clues and Notebook names to create a list of Notebooks suggested as Put destinations. You can accept or modify this list when Putting manually. Zip assumes it is complete and correct. Sifting is not an action which you explicitly trigger, but happens automatically when Putting or Zipping.

Source: Where an Entry came from. The possibilities are that you keyed it, Cloned it from an existing Entry, or Imported it from a file. If Imported from a text file, the folder and file names are used as the source; if Cloned, the original Entry Title is used. When you key the Entry, the Source is a user-specified signature that you set in the Preferences dialog.

Tag: These are labels on Entries; simply user-defined strings displayed on the first line of the Entry Header. There is one per Entry per Notebook. They are the only alterable value in a Frozen Entry.

Template Entries: Born to be Cloned, these Entries serve as reusable "forms." Comparable to printed pads for phone messages and such. Great for making mini-databases like a personal address book. A few for phone messages, addresses, and people. You will probably have a Notebook that contains nothing but Templates to have them handy for easy Cloning.

Tidying: This not a menu choice anywhere, but an automatic Zip-Zapping of Journal Entries which have remained Fluid beyond a user-specified time limit of between one and thirty days. It keeps the number of Fluid Entries small and manageable. The time limit is specified in the Preferences dialog box.

Timestamp: The current time in whatever format the Finder is using or in a sortable "YYMM-DD-HHMM" format. You can choose which one to use via the Preferences dialog box. It can be used

as a suffix on default Entry Titles so that you need not worry about (and may actually take advantage of) duplicate names. All Entries have the timestamp of their creation in their Entry Header; Frozen Entries have the timestamp of their Freezing as well. You can insert a timestamp into text by using a menu choice or keying command-T.

Title: The name of an Entry and its primary identifier. This appears at the top of the Entry, much like the headline on a newspaper story. You set the default Title in the Preferences dialog box. Titles need not be unique, but your life will be much easier if it is an accurate description of the Entry's contents. Titles on Fluid Entries can be changed.

Versionize : Preserve the state of a Fluid Entry by making a Frozen copy of it in the Archive. It is an easy way to do what is essentially a Zip-Zap followed by a Clone.

Zap: Remove an Entry from a Notebook. If a Fluid Journal Entry is Zapped, it will be Frozen as well. Zapping can be done in a single Entry by using a popup menu, or on many Entries using the Hub. It does not destroy the Entry because the original still exists in the Archive.

Zip: Put an Entry into Notebooks without user intervention or visual feedback. The Notebook choices made by Sifting are assumed to be correct and no dialog is displayed.

Zip-Zap: Zip an Entry using the choices made by Sifting and then Zap the original Entry.