

Bowser™: The Tree Browser

by

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Welcome to Bowser™

Bowser is an entirely new genre of software for the Apple Newton MessagePad™. Bowser places at the fingertips of its enlightened users, a portable “expert system”, capitalizing on the MessagePad’s mobility and point of service presence. MessagePad users from a host of different occupations or fields can call up Bowser and receive step-by-step expert advice, scripted instructions, guideline recommendations, or troubleshooting help. Bowser accomplishes this with an easy-to-use metaphor that is literally learned in seconds.

Using a “flipbook” metaphor, Bowser is, in essence, a sophisticated decision-tree browser. Any non-cyclic, directed graph (computerese) or similar flow chart (for everybody else) can be easily converted within Bowser’s intuitive decision-tree-growing environment into a flipbook. This format allows the flow chart or decision-tree to be traversed quickly using precious little screen space. Bowser can coexist and complement in-use Newton applications. In addition, at any time during the tree traversal process, the user can step back, and get an overview of where he or she has “climbed” in the tree so far, or get additional information about each step.

Bowser’s capacity for decision-trees is limited only by the amount of storage on the user’s MessagePad or Marco™. Dozens, maybe hundreds, of individual guidelines, checklists, or expert systems can be carried anywhere in the pocket or purse of the user. Individual decision-trees can be shared widely by creating an exchangeable file using the import/export features of the Newton Connection Kit™.

The number of potential uses for Bowser are almost limitless. Bowser can be used in healthcare to help physicians make treatment decisions by using detailed national, or even personal, practice guidelines. Appliance repairmen can tab through a troubleshooting checklist while trying to fix a broken dishwasher. Real estate agents can see if a client qualifies for a certain type of real estate loan. Private airplane pilots could ..., and the list goes on, in other yet undiscovered ways.

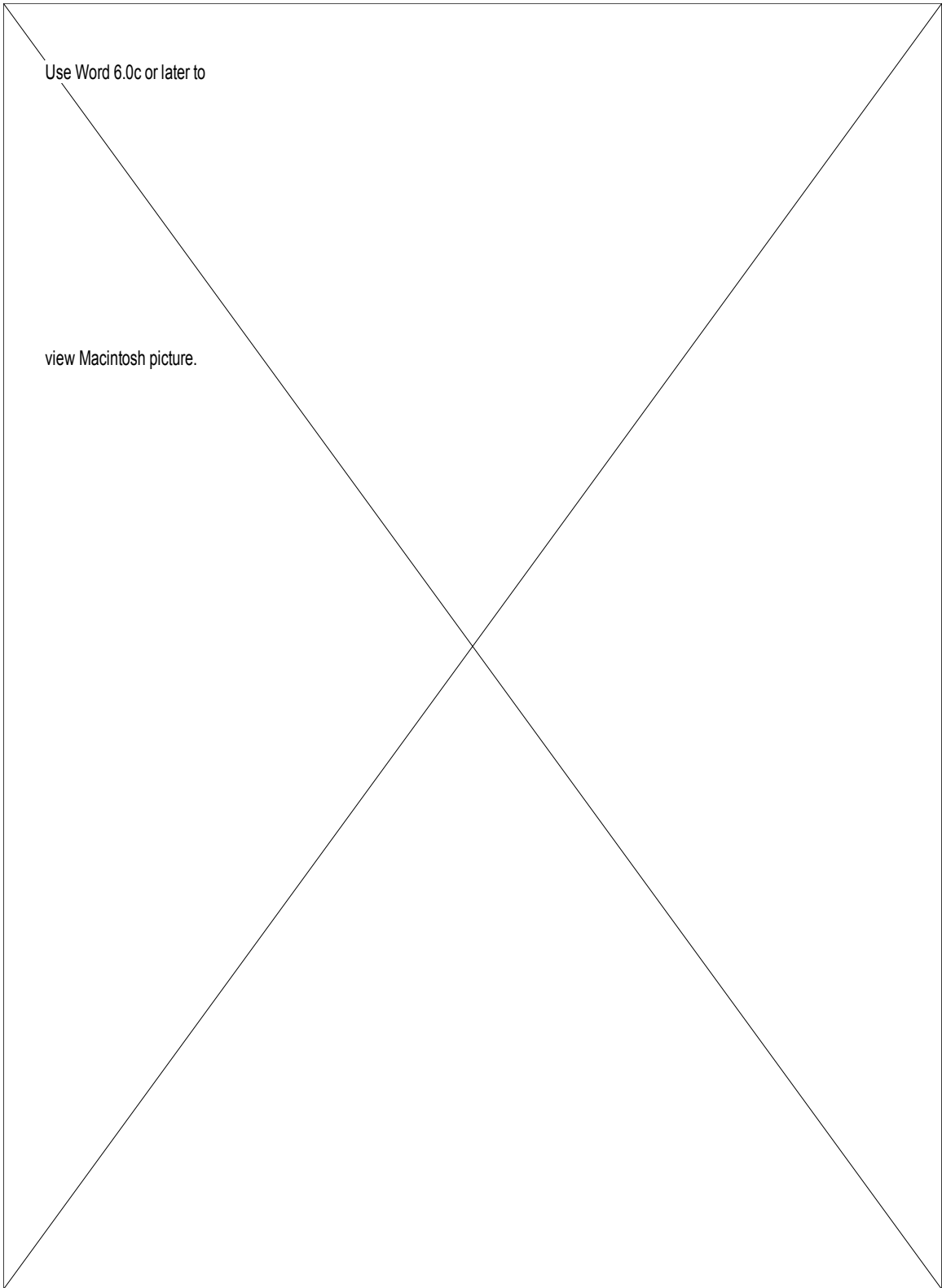
Bowser Requirements

- ∑ Any Apple Newton MessagePad with 2mb or more storage capacity
- ∑ Newton Connection Kit and cable - if exchange of trees (flow charts) with others is desired

Overview of Bowser’s Trees

Instead of referring to flow charts in this manual, we’d like to introduce you to the concept of “trees” and a very brief description of the terminology of trees and Bowser. Most of the concepts of decision-trees needed for Bowser are highlighted in Figure 1.

Also, the phrase “append a tree”, means that an entire tree, the root node and all of its branches, will be copied, duplicated, “pasted”, etc. to the tab chosen by the user.



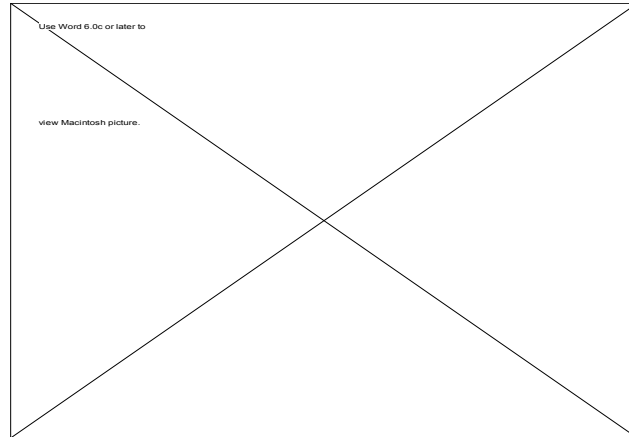
Use Word 6.0c or later to

view Macintosh picture.

Figure 1

Opening Screen

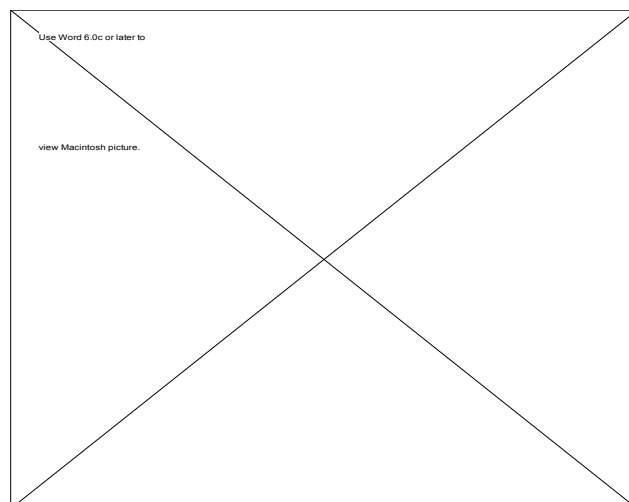
Here is the first thing you'll see when you click on the Bowser icon in the Extras Drawer (if you're not a registered user you'll see a "please register" notice first). This screen is draggable by holding the pen down near any edge and then moving the pen. You can scroll through the available trees by tapping and dragging the pen either above or below the list (the same goes for the Summary screen).



Button Functions are from left to right:

- "?"** Program credits, remove all files
- "Edit"** Create a new tree, modify an old one, or delete one.
- "Go"** Go to the flipbook of the selected tree
- "Cancel"** Close the application

If you tap the Edit button you can then choose any one of three options, creating a new tree, modifying one, or deleting a tree completely, by tapping on your choice:



Tree Editing

Whenever you decide to create a new tree or modify an existing one you'll go to the Bowser Edit Screen. Figure 2 highlights the functions of the various options.

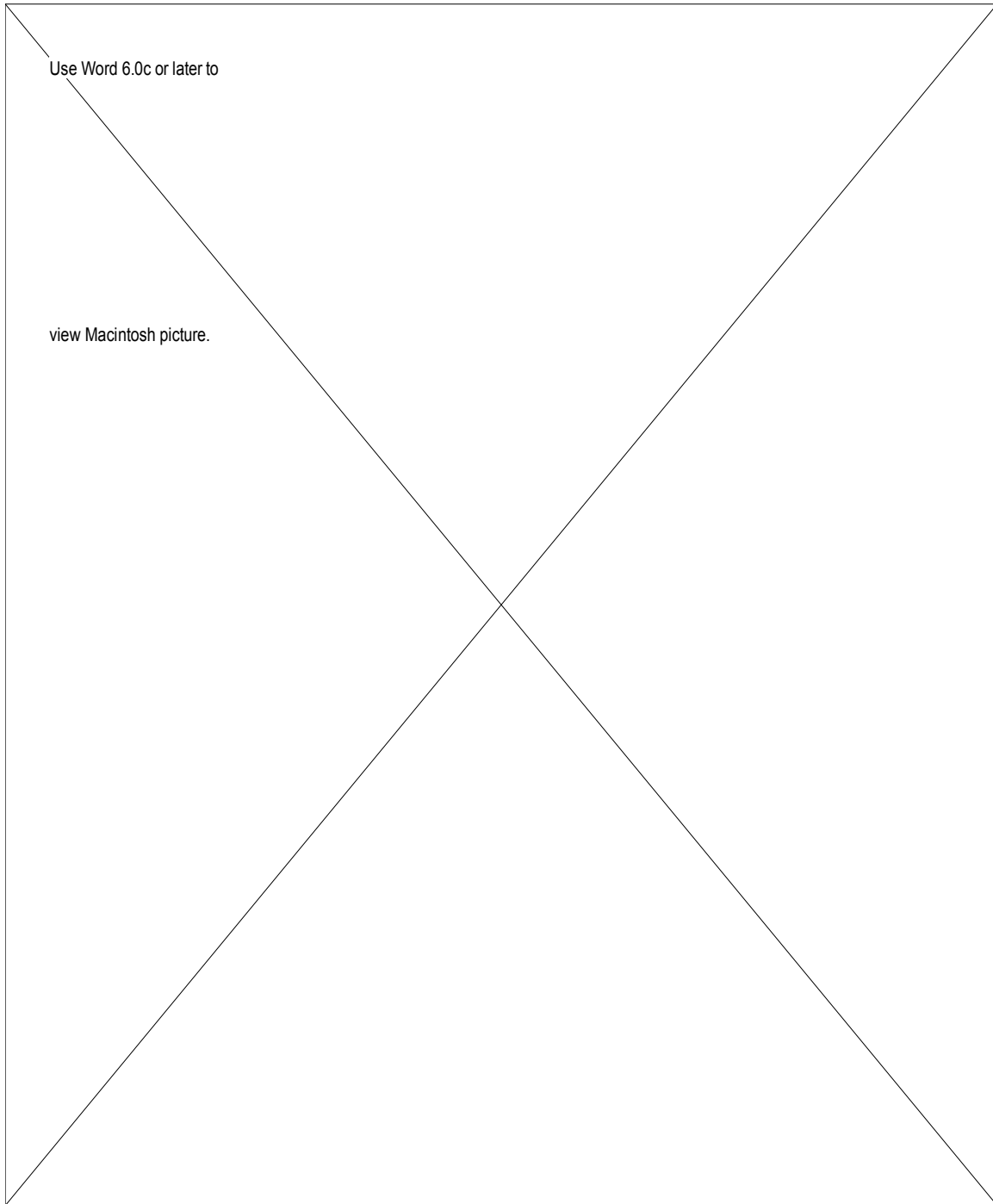


Figure 2

Navigating with the Flipbook

After you select a tree and “Go” to it you’ll see the actual flipbook for that tree. The flipbook functions are described in Figure 3.

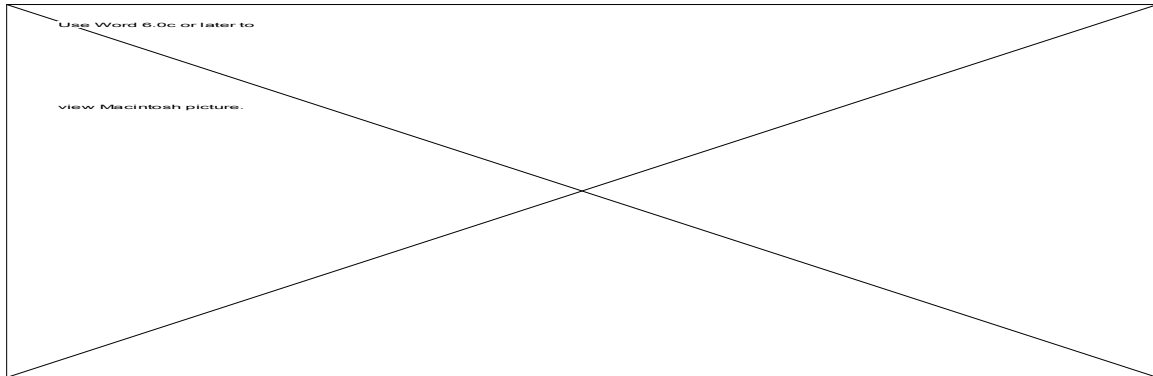


Figure 3

Exchanging, Backing Up Trees

If you have the Newton Connection Kit (NCK) you can export and import Bowser trees to individual files which can then be traded or exchanged with others. Actually, it’s also a very good idea to export any tree that you’ve invested a lot of effort in creating to a single export file as a backup. Once you create that backup, you won’t need to worry about having to reenter the entire tree again.

Exporting Trees

To export trees, first open NCK and synchronize your Newton with your desktop machine. Next, sort all of the Bowser nodes according to Node ID by clicking on the Node ID header. After the sorting is completed, select the entries beginning with the entry that has the name of the tree and all the subsequent entries until the next tree name entry. You should notice that the IDs of all of the selected nodes start with the same four letters. Then go to the File menu and choose Export... and choose the Newton File Format and follow the subsequent directions as far as where to put the file and what to name it. And that’s all!

NOTE: It is very important that the selection include all of the node entries PLUS the entry that includes the name of the tree. If this entry is not included, the Newton will be filled with nodes that will never be used or even accessed.

Importing Trees

To import trees, first open NCK and synchronize your Newton with your desktop machine. Select the Import... option in the File menu and select Newton File Format and then choose what file (tree) you’d like to import and that’s it!

NOTE: If the tree already exists on your Newton it will be duplicated. If you want to REPLACE a tree, first delete it within Bowser or NCK (selecting the nodes as described above), then import the possibly updated tree.

CAUTION: Each tree created on your Newton has a unique ID and each Node ID begins with that ID. However, if you import a tree that somebody else created on *their* Newton there is a 1:456,976 chance that the tree you want to import will have the exact same ID as a tree already existing on your Newton. If you do import that new tree with the same ID, all hell will break loose, and the results will be unpredictable. You can open any potential import file with most word processors and look to see if the Node IDs match any of the tree IDs on your Newton before you import to avoid this possibility, or don't and take your chances!

Pointers

It is best before you ever try to enter a flow chart or decision-tree into Bowser that you have the entire flow chart finished and in front of you while you enter each node. Mistakes are not easily corrected and the deleting of an errant node may erase many minutes of work. For example, pretend that you have a node with tabs “Yes” on the left and “No” on the right and you proceed to enter the rest of the tree that follows the “Yes” tab. Later, if you haven't worked out exactly what you wanted first, you may decide that you'd actually like the “Yes” tab on the right. In order to do that you will have to delete the node and all of the tree that you had entered under the “Yes” tab and then start all over. So the bottom line is **plan carefully!**

As a matter of style, you may wish to be consistent within your flipbook. For example, it is probably easier for the user to flip through the book if all the “Yes” tabs are on the left, and the “No”s on the right (or vice versa), rather than for one page the “Yes” is on the right and on another page it is on the left.

If your flow chart or decision-tree has nodes, or even entire branches, that are frequently repeated, it may be easier to first make each of these nodes or branches a separate tree. Then when you've saved all the sub-trees as actual trees, when you do get around to making the main tree you will be able to just append each of these smaller sub-trees to tabs at the appropriate places. And when you're finished, you can delete the sub-trees to free up storage space.

Removing Bowser's Files

If you decide to remove Bowser from your Newton device, just removing the application package will still leave various Bowser files taking up precious storage space. To remove these extra files, go to the information screen (“?” button on the opening screen), and tap my nose. If you decide to remove those files, Bowser will close, and then you can remove the Bowser application in some other way.

Registration

In order to register Bowser you must send a \$20 (U.S.) check made out to Don Miller, your name, address, email address, type of desktop computer (Mac or PC), along with the EXACT, PRECISE, IDENTICAL (including spaces, punctuation) name you have put in your Newton (in Preferences, Personal, Name) to:

Bowser
c/o Don Miller
2904 SW Lane
Topeka, KS 66611

We will send you back by email or regular mail (your choice) the code word that will stop the annoying "This is an unregistered copy of..." message from appearing. You will need to keep this code word around in case you ever remove and then replace Bowser™ on your Newton. By the way, if registered users change the name they use in their Newton, they'll have to request another code word.

Also, but no promises, and it depends on the shareware fee response, I plan to develop a desktop editor for Bowser trees for registered Mac users.

Comments, Questions, Etc.

If you have any comments, questions, suggestions for the next version, etc., please send them to the address above or email me at DrMiller@aol.com.

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