# KingFisher2

Udo Schuermann

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WRITTEN BY	Udo Schuermann	January 9, 2023	

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# **Chapter 1**

# KingFisher2

# 1.1 KingFisher Release 2

KingFisher Release 2 September  $\leftrightarrow$  5, 1994

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This is preliminary documentation. Please excuse incomplete and missing information!

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- 1.2 Distribution rights

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#### 1.2 1 INTRODUCTION

KingFisher 2.3 is a special purpose database tool designed to  $\,\,\hookleftarrow\,\,$  for storing

and retrieving information about software. It is fully compatible with Fred Fish's Product-Info Specification v6 (which I helped design) which means that, ideally, information in the database is broken up into a large number of distinct fields, each of which has a specific meaning and can be examined individually. The benefit to you is greater flexibility: you can search for software by a specific author, for programs that have at least reached version 2, or software that is not commercial or been released after a certain date. Furthermore, how information is formatted can also be specified on a field-by-field basis, providing you with the means to produce custom databases for other applications.

An ARexx interface with the same formatting capabilities and same advanced search capabilities provides a perfect interface between the databases and any application wishing to retrieve information from them.

KingFisher 2.3 is a complete revision of the original KingFisher. As such, it is no longer aimed at Fred Fish's AmigaLibDisks ("Fish Disks") only, but

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will serve to index the Aminet as well as your club's software collection. The original KingFisher was, above all, a single user's tool for a single database. In a multi-user environment it fared less than well, and storing all but "fish" in its database was not an excercise for the non-technically minded.

KingFisher 2.3 seeks to provide you with all the power of the original, and build upon this power to provide you with multiple user interfaces, serve you with multiple databases, and allow an unlimited number of simultaneous users to search and browse the database.

This flexibility is achieved through
Client-Server Architecture
, a method

of isolating the database itself from the presentation portion, whereby a so-called Server provides access services, and one or more Clients establish connections to the Server and obtain data from it. It is the responsibility of the Clients to present the data, and it is the Server's responsibility to read and write the database. The Server will allow more than a single Client to attach to it, and because the Server can arbitrate conflicts, a true multiuser environment becomes possible.

## 1.3 1.1 Components

KingFisher is no longer a single, self-contained program. It  $\leftarrow$  is now the collective name for several programs:

KFServer

The KingFisher Database Server. This program is absolutely required!

KingFisher A GUI Client based on GadTools.
 This is what you may use the most to access
 the database.

RexxFisher A Client based on ARexx.

This is what you'd use to give one or more BBS users access to the database.

ReOrder A demonstration Client based on the CLI.

# 1.4 1.2 Distribution rights

KingFisher 2.3 is a Shareware product made available in two versions: one meant to be distributed in archived form for the price of no more than \$3 (US) per disk or equivalent in foreign currency; the other is available only to registered users and available only from the author or authorized distribution sites.

Distribution of any portion of KingFisher 2.3 as part of a software or

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hardware product, including CD-ROM, where KingFisher is stored in ready to use form, such as a CD-ROM index/search tool, is not permitted without a prior license agreement with the author of KingFisher 2.3 for such use.

# 1.5 1.3 Registration and Updates

If you have already registered KingFisher, my thanks for your  $\leftrightarrow$  support! If

not, please read the following sections:

KingFisher 2.3 is a Shareware product. You can examine the program at your leisure, see what it offers you, and when you are ready to buy, send in the registration fee and receive the latest version as well as email support, upgrades, programming support, etc.

The registered version differs from the freely distributable evaluation copy in that the evaluation copy limits you to two simultaneous connections on the KFServer, meaning that you could run two copies of KingFisher or one copy of KingFisher and one of RexxFisher, but not three.

The registered version has no such limitations, making it the search tool of choice for multi-user bulletin board systems!

Why should you register KingFisher?

You received KingFisher for free. You may have downloaded it from Aminet or from a BBS. You may also have paid for a package, such as one of Fred Fish's CD-ROMs, but KingFisher came free with the package. This is because Fred and I have a deal: he gets to distribute KingFisher as part of his great CD-ROMs, and you get a program with both a past and a future.

But what do I, the programmer, get for all the time I spent on KingFisher? I cannot live off thank-you notes (although I appreciate all I get) and CD-ROMs make a poor diet (even when served with wine and cheese;—) so you can imagine that I am hoping for something more substantial to reward me for my efforts, and I am hoping that you will show your appreciation for my work!

The original KingFisher was my return of favors to the Amiga Community. It was free, it was fun, it taught me a lot. But best of all (for you) it was free. KingFisher 2.3 is no longer free. You need to register the program.

Now, why should you register a program that came to you free? It's simple: You get to use and evaluate it at your own pace, on your own Amiga at home, not some store's machine. You are under no pressure to buy. When you feel that you want to keep the program, you simply send me the registration fee. This registration fee is lower than what a commercial product would cost you, because you are not being charged for dealer overhead, distribution costs, or fancy packaging (every part of KingFisher is fully recyclable and wastes no natural resources:)

If you live in Europe, you can register with someone I know in Germany! In North America, you can register with me directly. Those of you in other parts of the world get to choose the site most convenient to you. I will support you anywhere within the bounds of our Solar System.:)

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What you get for registering Here is what you get for registering:

 KFServer that is able to allow an unlimited number of clients to connect. For you BBS operators, that means you can serve dozens, hundreds, thousands(!) of users! (Billions and billions!;-)

- KingFisher will allow you to save and restore Search Sets, which are subset databases constructed from all matches of a search. It will also allow you to keep a history of search expressions from which you can choose.
- · You will receive Programming Documentation so your own programs can connect to the KingFisher 2.3 Database Server. Are you the author of BBS software? Would you like to write a "Door" or other interface, rather than going through RexxFisher? Do you want to try your hand at writing a (gasp!) better KingFisher?
- Technical Support via electronic mail and an electronic KingFisher Mailing List. You will also be the first to receive new versions of the included software (even maintenance releases which won't always make it to the general public.)
- My pledge that as long as there is demand for KingFisher, I will continue to support it, regardless of where Commodore is going.
- · Your conscience will let you sleep better at night, knowing that you are really supporting your favorite computer. What good is your Amiga if nobody wrote software for it anymore? Support your software authors today, because tomorrow it may be too late!

As a final word of encouragment, should you feel hesitant about registering KingFisher: With the original KingFisher I hope to have established that quality software and quality support are important to me. You will receive nothing less from me in the future. KingFisher 2.3 is my first attempt to get some return on my investment of time through the good-will of you, the appreciating user. With your support, KingFisher 2.3 will grow far beyond what you see before you today.

Consider your registration a vote. Vote for the Amiga's growth! WITHOUT your support it may never achieve its full potential. Don't take that chance. Register today and support your existing investment!

#### How to register

There are two sites to receive your registration fee. If you live anywhere in Europe, you should use the site in Germany. Anywhere else in the world, such as Australia, Japan, or places even further away than that ;-) should register directly with the author, in the United States.

#### United States:

~~~~~~~~~~~

Send \$20 (US) in the form of a personal check drawn on a U.S. bank or money order or similar form of payment to:

Udo Schuermann

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6000 42nd Ave. Apt. 405 Hyattsville, MD 20781-1518 USA

#### Europe:

~~~~

Send DM30 in the form of a EuroCheque or check drawn on a German bank. Direct bank transfers (Überweisungen) are also available.

Uwe Schürkamp Jöllenbecker Weg 4 32051 Herford GERMANY

Sending cash is discouraged for reasons that it's untracable. In the event that it gets lost in the mail, the loss would be yours to carry. If you live in a land far, far away from either Europe or the USA, then your best bet may be to send cash, as many (international) banks do not cater to the exchange of small sums. If you decide to send cash in the mail, make sure that your letter in no way reveals its contents to someone peering at it against the light, or feeling the bank notes through the envelope.

Please do not ask for technical support from any site but the author!

The European registration site is a good friend who does not know enough about KingFisher to offer technical assistance. Also, if you absolutely must talk to him and look up his telephone number, please do him and his family the courtesy of calling only during regular daytime hours. Thanks!

#### Updates

Updates to newer versions are available at the same addresses. You should specify how you want the update to be processed. Examples are: the latest version (we keep on record the latest version you received from one of the registration sites), or the next available version within a certain time frame (say four weeks; I might be close to releasing a new version shortly and you might be happy to wait a little longer to get that, instead of the soon-to-be outdated one. We're human beings, we read your request and do our best to listen.

Updates are handled at the same addresses as above. In Europe, send DM10; in the U.S. send \$5 (US). Updates may also be available electronically on Aminet (and eventually on BBSs.) These will be patch files applicable only to the original and unmodified binaries of specific versions of KingFisher. Keep your original disk!

## 1.6 1.4 Installation

KingFisher 2.3 is best installed from the distribution disk with the standard Commodore Installer by double-clicking on the Install-KingFisher

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icon.

In novice mode, KingFisher will be installed to a drawer named SYS:KingFisher2/, otherwise you get a choice. You must have 2MB of space on the disk where you install the program. Running KingFisher 2.3 requires merely double clicking on the KingFisher icon, or typing KingFisher at the CLI when your default directory is the installation directory.

Should something go awry, it is possible to install KingFisher manually, but this requires some effort and attention to detail. The distribution disk stores most of its files in a compressed format because the complete distribution contains nearly 2MB of data. Manual installation, therefore, requires you to uncompress the files.

# 1.7 1.5 Uninstalling KingFisher

KingFisher is installed into a single directory. No files are placed elsewhere in the system unless some change to the basic setup is made. This makes uninstallation as easy as dragging KingFisher's drawer into the trashcan (using the Workbench), or deleting the subdirectory and all its contents (from the CLI.)

# 1.8 1.6 Technical support

The quickest way to get technical support is through electronic mail. This requires that you have an account with reliable Internet access. In the past, I've tried to help some people and my replies "bounced." I feel bad that my answers never made it back to them, but there really is nothing I can do.

Email: walrus@wam.umd.edu

Postal mail is another way to get in touch with me. I've tried to be good in the past about replying to all letters, especially those that asked for some sort of response, but I confess that I have a problem allocating space on my desk and as a result things have gotten lost.

Udo Schuermann 6000 42nd Avenue, Apt. 405 Hyattsville, MD 20781-1518

NOTICE: KingFisher's status as a shareware product means that my first priority for technical support is towards registered users. If you are not a registered user, I will still try to help you, but if your problem is complex and requires too much of my time ... well, you can probably imagine how these things go.

#### 1.9 2 CONCEPTS

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- 2.1 Origin and History Fred Fish, Aquarium, and KingFisher -- Sound "fishy" to  $\ \hookleftarrow$  you?
- 2.2 Client-Server Architecture
  A powerful multiuser database concept
- 2.3 Search Expressions How to formulate expressions to search for exactly what  $\ensuremath{\hookleftarrow}$  you want
- 2.5 Custom Formats Customizing visual, printed, and exported presentation of  $\ensuremath{\hookleftarrow}$
- 2.6 KFServer The most important, though least visible, part of  $\ensuremath{\hookleftarrow}$  KingFisher 2.3

The Product-Info Specification

- 2.7.1 Body and Miscellaneous
- 2.7.2 Available Fields
- 2.7.3 Starter .Product-Info 
  The Product-Info Specification v6: Everything you need to  $\hookleftarrow$  properly

describe your own projects!

- 2.8 KingFisher Tooltypes Overriding .prefs defaults with CLI or TOOLTYPE parameters
- 2.9 Differences from KF 1.40 Helping users of KingFisher 1.40 make the transition

# 1.10 Implementation of Client-Server Architecture

The Amiga's multitasking Exec (the software that handles all aspects of multitasking, including interprocess communication) provides a highspeed method of passing large amounts of information from one task to another.

The KFServer creates a message port, a rendevouz, to which clients deposit

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requests for processing. The KFServer processes these requests one after another (first come, first served) and returns the results to the sender.

And that, my friends, is all there is to it! Quite simple, really. :)

Naturally, the protocol of how exactly to ask the KFServer for information requires some attention to detail. If you are interested in writing client software for KFServer and you are a registered user, you are eligible for a nearly free package\$^1\$ to help you get started. This package includes source code, extensive documentation on the KFServer API (Application Programming Interface) and source code to isolate you from the grueling details of setting up messages with parameters for every single request sent to the server.

All code supplied with the developer package is written for and compiles with SAS $\mbox{0.51}$ .

References: AMIGA ROM Kernel Reference Manual: Libraries. Exec Chapter. COMMODORE-AMIGA "C" include files: exec/ports.h

The KingFisher Developer Pack is available via email directly from the author at the address walrus@wam.umd.edu

The KingFisher Developer Pack is available by September 1, 1994.

# 1.11 2.1 Origin and History

There are many terms used by KingFisher and by this  $\ensuremath{\hookleftarrow}$  documentation which

revolve around the concept of those strange dwellers in the water, fish. The reason for this is that some years ago, I believe it was in 1985 to be exact, a fellow named Fred Fish began to collect freely distributable software, put it all on disks and distributed these in a coherent and reliable manner. The concept of "Fish Disks" was born.

Then came a man named B. Lennart Olsson, who created the first widely distributed tool for storing and searching the contents of Fred Fish's disk library. Compared to KingFisher, Aquarium was somewhat primitive, yet it served the Amiga community admirably for a number of years.

Having become the self-appointed keeper of the Aquarium Database, and spending quite some time every month updating the database, the flags that Aquarium needed to find information, and distributing updates to the database so that not everyone had to do the same thing over again, made me come up with the tool that became KingFisher. Its first release, on December 1, 1992 was quickly followed by several more versions until it arrived after seven public updates at version 1.40.

<sup>\$^1\$</sup> The KingFisher Developer Pack costs the same as an upgrade but you also get the most recent version of KingFisher "thrown in" as a bonus. If you ask for only an upgrade, you get the upgrade. If you ask, instead, for the KingFisher Developer Pack, you'll get both, regardless if the upgrade will actually upgrade your current version. Of course, you could always explain that you're willing to wait some amount of time for the latest release.

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But KingFisher 1.40 still fell short of what I wanted to accomplish. A lot of people wanted features that I couldn't comfortably patch into the code, and it was a hopelessly single-minded system, unable to work with anything but a single database and a single user. Those who are using KingFisher as a BBS support tool will be especially aware of its shortcomings in this area. All this, the feedback from hundreds of users, and Fred Fish's need for an effective database tool to support his move to a CD-ROM distribution led me to design what you have in your hands now: KingFisher 2.3

It serves multiple databases to multiple users in any configuration, fully supports Fred Fish's Product-Info Specification v6 (which I helped design), and offers practically every feature of KingFisher's first release that can be properly supported. The databases can be accessed through an ARexx interface and a resizable and proportional font aware GadTools window that opens on the default public screen.

Example of a crazy session:

Eight users of your BBS are searching for programs with RexxFisher, five are scanning the GoldFish CD-ROM database, two are scanning the latest FreshFish CD-ROM, and another is looking for software on the newest Aminet CD-ROM.

Meanwhile, you decide that you need something to test your .guide documentation file to make sure everything is in order. You start KingFisher 2.3 (the GadTools interface) and select the GoldFish CD-ROM database and join those eight BBS users, all searching ...

Being a savvy connoisseur of the Amiga's multitasking, you are not content to just sit and stare at the computer while it's chugging along, so you start up another copy of KingFisher 2.3 and select your Amiga Club's database, then add the file of new descriptions.

And just to get an idea how things are going, you ask the KFServer for a status listing of activities. At the CLI you type kfserver status

and find out that several of the BBS users have finished and there are only two left checking the database ...

And just then KingFisher finds you something to check unresolved links in an AmigaGuide document and you decide to copy that off your GoldFish CD-ROM which is still mounted with the database that one of the BBS users is scanning ...

And

more is on the way

. . .

### 1.12 2.2 Client-Server Architecture

Client-Server architecture is a database concept whereby one  $\ensuremath{\hookleftarrow}$  unique portion

of the software, called the server, is responsible for controlling access to data, while one or more clients talk to the server and request data. It is the clients that are responsible for presenting the data, perhaps alter KingFisher2 11 / 71

it and then handing it back to the server for storage.

The Client-Server model provides for efficient, successful, and safe multiuser arbitration and is widely used in the computer industry.

KingFisher implements this same powerful concept to provide you with safe access to one or more databases, and to extend this access, if you wish, to a number of simultaneous users that may have access to your system through BBS software.

KingFisher's server software is the  ${\tt KFServer}$ 

KingFisher itself is "merely" a client that talks to this server.

RexxFisher, also, is a client that talks to the server.

And so is ReOrder, a little tool available in source form, meant more as examples than useful programs.

All of these together form the product named KingFisher.

If you wish to learn a little bit about how the client-server architecture is implemented in KingFisher, then click

here

## 1.13 2.3 Search Expressions

If you have Simple Substrings

selected, please note that this option causes an alteration to the syntax that the expression parser accepts. Described below is the full expression syntax accepted by the parser when the Simple Substrings option is not selected.

The smallest expression has the following pattern:

field comparison value

field is the name of any

database field

. An example of this

would be name, description, version, or author.

comparison is a one or two character symbol. The following are valid:

- = or == The field contents are equal to the value
- <> or != The field contents are not the same as the value
- The field contents are alphabetically less than or equal to the value
- >= The field contents are alphabetically greater than or equal to the value
- < ... alphabetically less

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- > ... alphabetically greater
- \$ The field contents contain the substring given by the value

value is a string of characters. If the string contains any of
 the special symbols, such as: ( ) & | ^ or blank spaces, it
 becomes necessary to enclose the string in single or double
 matching quotes: "" or ''

Examples: name=kingfisher
 version >=2
 author \$ "matt dillon"

Notice that spaces surrounding the three parts of the expression (field, comparison, and value) are unimportant. Let us now combine two expressions to form a more complex one:

name = kingfisher & version >= 2

Notice the new symbol, &, that we used. This is a boolean operator that you can use to connect two expressions. The following boolean operators are valid:

- & Logical AND Both the expression on the left and on the right side of the operator must evaluate to TRUE, or else the combined expression formed from the two will evaluate to FALSE.
- | Logical OR If either or both of the expressions on the Inclusive OR left and on the right side of the operator evaluate to TRUE, then the combined expression also evaluates to TRUE.
- ^ Logical XOR Either one, but NOT both expressions on the Exclusive OR left and on the right side of the operator must evaluate to TRUE, otherwise the combined expression is FALSE.

The expression above, therefore, means: if the name equals 'kingfisher' AND the version is (alphabetically) greater than '2', then we have found a record that might be interesting.

What does the following mean?

```
name $ 'aquarium' | name = kingfisher
```

It means if the string 'aquarium' appears as a substring in the name field, OR the name equals 'kingfisher' then this is a match.

Let's examine a more complex expression. Assume we want to find all the records with 'aquarium' part of the name, OR all the ones named kingfisher which have a version of at least 2. Does the following expression work?

```
name$aquarium | name=kingfisher & version>=2
```

The answer is no! KingFisher uses left-to-right evaluation, meaning that the expression first evaluates

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name\$aquarium

then it evaluates

name=kingfisher

and then checks if EITHER is true. Only then will it proceed to test the version. If we use parentheses to demonstrate how KingFisher actually evaluates the expression, you'll notice immediately that we had something else in mind:

```
( name$aquarium | name=kingfisher ) & version>=2
```

But KingFisher does understand parentheses, so we can easily fix the expression to do what we meant it to do in the first place. We just have to remember to use them:

```
name$aquarium | ( name=kingfisher & version>=2 )
```

You can use many levels of nested parentheses, and it is always safer to "overdose" on parentheses than to assume that the expression really means what you hope to express.

#### 1.14 2.4 Search Sets

Search sets represent one of KingFisher's newest, and perhaps  $\leftarrow$  most useful

features. Before searching, you must select whether or not you wish to make this an interactive or a non-stop search by checking or unchecking the PREFERENCES/Searching submenu item . Only when the

Stop on each match

item is not checked, will KingFisher produce search sets that  $\hookleftarrow$  you can

examine at your leisure. The value of both choices is discussed there.

Search sets need not be saved to be useful, although you can save yourself much time if you save the results of oft-repeated searches. Search sets do not require much diskspace: approximately 5 bytes per record. A thousand records, which is nearly  $\frac{1}{4}$  of Fred's 1000 Fish Disks, would require about 5K on disk.

When a search set is loaded, regardless if it is shown in the listview, the gadget with representations of

Fred's Fish Logo

will become active. You

can click on this to open and close the Search Set window. Clicking on the Search Set window's close gadget will also close the window. Neither of these actions will destroy the current Search Set!

The Search Set is only cleared from memory by one of the following actions:

Quitting KingFisher

Beginning another search

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Loading a new Search Set

Loading a Search Set will, if necessary, switch to the database to which the Search Set applies, and will position you at the first record listed in the Search Set. The current Search Expression is also remembered to remind you what the Search Set represents.

## 1.15 2.5 Custom Formats

The format that KingFisher uses to display, print, and export  $\hookleftarrow$  fish is

programmable! This means that you can customize the display just about any way you like to! This may require some persistent trial-and-error, but the results may be worth the effort if your needs are not served by the default format. Here is what the default format looks like:

```
@{name}@{version| }@{date| (|) }\n
@{short|\t|\n}
@{author|\tBy |\n}
\n
@{description}\n
@{requirements|Requirements:\n\>|\n\n}
@{restrictions|Restrictions:\n\>|\n\n}
@{address|Author's Address & Email:\n|\n}
@{phone|Phone:\>|\n}
@{fax|Fax:\>|\n}
@{email|email:\>|\n}
@{distribution|Distrib.:\>|\n}
@{price|Price :\>|\n\n}
@{installsize|Installs:\>|\n}
@{source|Source :\>|\n\n}
@{exectype|ExecType:\>|\n}
@{construction|Constr.:\>|\n}
@{tested|Tested :\>|\n\n}
@{docs|Docs:\n|\n\n}
@{references|References:\n|\n\n}
@{reference|References:\n|\n\n}
@{keywords|Keywords:\>|\n\n}
@{described-by|Described-by:\>|\n}
@{submitted-by|Submitted-by:\>|\n}
@{submittal|Submittal:\>|\n}
@{stored-in|Stored-In
                        :\>|\n}
```

Looks gruesome, doesn't it? I agree, but computers are just so good at making sense of gruesome things, and they're terrible at working with things that we humans have no trouble understanding. This is why the formatting is described by a gruesome mess: KingFisher understands this stuff a lot easier. The bottom line is that it can display things much quicker this way, and in the end that's probably more important than a pretty behind-the-scenes format file.

So, how can we make sense of this gruesome mess?

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It's actually less gruesome (nice word, eh?) than you might think. First, you may have already noticed (you're pretty quick, aren't you?) that almost everything begins with the symbols @{ followed by something gruesome and is terminated with a } Coincidence? Definitely not!

Let's look at the first line and show all four elements on that line, one at a time, in bold:

```
@{name}@{version| }@{date| (|) }\n
@{name}@{version| }@{date| (|) }\n
@{name}@{version| }@{date| (|) }\n
@{name}@{version| }@{date| (|) }\n
```

You will notice that the first item is @{name} which looks simple enough. It displays the contents of the name field!

The second line, <code>@{version| }</code> looks a little stranger: there is a | symbol stuck in there, along with a blank space. Let me quickly point out that the gruesome mess between <code>@{ and }</code> symbols can contain more than only a field name. The complete format (without the blank spaces!) is:

```
@{ field | prefix | suffix }
```

This means that the | symbol is a separator, and the blank space is the value of the prefix portion. But what, you may ask, is the point of this weird concoction? Why not put the space outside the whole  $Q\{\}$  construct?

The reason is that when the specified field is missing from the database or contains no information, then neither the prefix nor the suffix, if any are given, will be processed. This neat trick is used extensively and permits us to print something additional before and/or after the field contents if the field contains data, and do absolutely nothing if the field is empty.

Let's look at the third line item,  $Q\{date|\ (|)\}$  which contains both prefix and suffix strings. If a date field does not exist in the database, there won't be a non-sensical " ()" shown. A content sensitive display format!

The fourth item is one that will be quite familiar to C programmers: \n is a newline. KingFisher begins the following text on a new line. This allows you to break up things into more readable sections. The end of line in the file is actually considered merely a blank space by KingFisher so that you can break things up into a more readable form.

Here is a listing of the special formatting symbols. They may be used both inside a  $\{\}$  construct and outside:

\. A single . (dot) especially useful if/when such a dot is found (against normal practice) at the very beginning of a line of text and where it would then be misunderstood to represent a field-name.

\n A newline, an end-of-paragraph.

\t A tab, which is equivalent to approximately 5 spaces.

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\> A paragraph indent, which allows you to create hanging indentations of text. The indentation will remain in effect throughout the contents of a field, so it is, in effect, a temporary change of margins. Newlines embedded in a field's data will only reset back to approximately the same column as the field's first character.

At the moment, \t and \> do not quite act the way described. This is not your fault but mine. Things get pretty tricky. Expect this to get fixed soon.

All other text encountered is transferred verbatim to the display.

For descriptions on format and purpose of available fields, please refer to the Product-Info specification from Fred Fish. The following is a list of the fields referenced in the

Product-Info Specification v6

name fullname type short
description version date author
restrictions requirements reference distribution
price address email exectype
installsize source construction tested
run docs described-by submittal
stored-in

### 1.16 2.6 KFServer and Databases

Without the KingFisher Database Server, KingFisher is little more than gerupftes Federvieh (a plucked bird, in English, but it sounds much funnier in German:)

KFServer is the all-important portion of the software. Regardless how you access the database, through KingFisher's GadTools GUI, RexxFisher's ARexx interface, through 3rd party client software, or something you wrote yourself, KFServer will always come into play!

Both KingFisher and RexxFisher know how to start the KFServer if it is not already running. KingFisher is, at this time, somewhat better at this beause it can be told to start KFServer from a directory other than the one in which KingFisher starts itself.

For the KFServer to successfully start, it must be able to read its .prefs file. This file is named "KFServer.prefs" and must contain at least the following information. All blank lines or line beginning with a hash (#) mark are considered comments:

default-database=1000Fish.kfdb

This line specifies the so-called "Default Database" which is the database KFServer will always open. Any client connecting to KFServer will have this database made the initial database until it selects a different one. In the case of KingFisher, you may not realize this happening, because KingFisher remembers the last used database and automatically switches to

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that before displaying the first record.

Notice that the filename, 1000Fish.kfdb, has a .kfdb extension. It stands for "KingFisher Database." The contents of a .kfdb file will be described below. First, let's examine what optional items you can place into the KFServer.prefs file:

#### maxclients=5

This line specifies that KFServer will not allow more than 5 simultaneous clients to connect at one time. This value must be at least 1, and cannot exceed KFServer's maximum. Unregistered versions of KingFisher have limit of 2. Registered versions have a limit which you will never be able to exceed unless you have too much time on your hands and you are ridiculously rich and can afford 256MB of RAM for your Amiga to run hundreds of millions of copies of KingFisher.

#### verbosity=MUTE

The verbosity value specifies how talkative you want the KFServer to be. Ordinarily you will want to set this value to MUTE to make the KFServer shut up as much as possible. Only real problems will be reported, things you should be aware of (like a database being unavailable.) If you find that something is not working, you might want to try a higher verbosity value, until you either can no longer stand the amount of output or you find the problem. The following values are available, and you can specify them in upper, lower, or mixed case:

mute Cries out in only terribly critical situations terse Hardly sends any messages to the output window quiet Sends occasional messages of interest to the output window chatty Rather talkative with lots of status information debug Produces a nearly continuous stream of information

#### keep-running=yes

By default, KFServer will automatically exit when the last client program detaches, requiring to be started again if another client then wants to use the KFServer. By setting the keep-running value to "yes" (instead of "no", or omitting it altogether) the KFServer will remain running even after no more clients seem to need its services. This behavior is best suited for situations where clients start and quit frequently, such as with a BBS.

NOTE: Earlier releases of KFServer kept running unless keep-running was set to a value of "no." This behavior has now been altered for less confusing single-user operation.

window=CON://640/480/KingFisher 2.3 Server Messages/AUTO

The output file to which KFServer writes all error messages should be set to a console window (such as given above) rather than a file, although reason could certainly be found where a file would be desirable. KFServer does not care where you send output, so long as you specify a valid file.

The format of .kfdb files

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The KingFisher Database file must have an extension of .kfdb, otherwise KingFisher will not be able to list them to a client, should the client wish to know what databases are available. The following are absolutely required in all .kfdb files. All blank lines and those beginning with a hash (#) mark are considered comments:

database-name=1000 Fish Disks

Specifies the descriptive name of the database. This is the name presented by KingFisher to the user when using the Open Database command. Keeping this name relatively short is a virtue. The example is about as long as you would ordinarily want to make it.

section=00000,02500,MyFish:Fish01.data section=02501,05000,MyFish:Fish02.data

One (or more) sections must be specified. Unlike the original KingFisher, which used a format strikingly similar, the two numeric values (0 and 999, as well as 2501 and 5000 in our two examples) are not disk, but record numbers. The above values work for my own copy of the database used by KingFisher 1.40, but it may not work for you. As KingFisher 2.3 ships with a functional database of all 1000 Fish Disks, I do not expect this to be an issue.

The three portions of each section value are:

beginning record The first record in the database is 0, not 1. KingFisher always adds 1 to the record numbers because that is how most people view a database.

ending record The last record in this section of the database.

storage filename The exact name of the file where you wish to store a portion of the database.

Note, that you can break up the database into as many section as you wish, or keep it all in one contiguous chunk. The organization of a new database is entirely up to you. The CLI tool 'ReOrder' can be used to effectively change these values by copying all records from one .kfdb file to a new .kfdb file with different ordering, then removing the original .kfdb file and all related files.

index-name=MyFish:1000Fish.index

The index-name specifies the name of the main index. This file will be recreated whenever something about the index changes, such as new records are added, or the database is truncated, or you alter any of the flags that are part of each record. KFServer updates this index file on disk whenever the database is closed.

The following are optional values you can place into the .kfdb file to determine how KFServer is to treat this database:

index=inram

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The current implementation of KFServer loads an index file into memory, whereby the index is said to be "INRAM." While an "ONDISK" index has not been tested enough for me to make the claim that this will work, enough of it has been tested that it may actually be usable and even error free.

Please be advised that an ONDISK index may seem functional, but is not yet officially supported. If you wish to experiment with this option, feel free to do so, but please understand that the results may range anywhere from index-related access errors to a corrupted index file.

index-increment=100

This value defines by how many records at a time KFServer should expand an inram index whenever you add records to the database and the index need to grow. It is more efficient to grow the index in large leaps at a time, but can waste memory if, for example you are growing the index in step of 1000 index records, and after 1000 records, you merely add one additional record to the database. KFServer will then have allocated 2000 records but is only using 1001 of them.

Do not be overly concerned about this, however. The initial index size when KFServer open a database, is always exactly what is needed, no more. Only adding to the database will bring the index-increment value into play.

keep-open=yes

With the exception of the Default Database specified in the KFServer.prefs file, KFServer will always close a database (and all its files) when no client remains that is using it. If, for some reason, you rather have the files, as well a the database index, remain open and loaded, you can set this behavior for each database with this value.

read-only=yes

Marking a database read-only signifies to the client program that certain operations, such as the adding of new records or the alteration of flags, is not permitted. The server may still accept such commands if they are not disabled by the client, but if a database can truly not be modified, because the index is located on read-only or write-protected media, then the server may produce error messages to this effect when a change needs to be written back to disk.

The following entries are, at this time, ignored, but will be used in a future version of KFServer:

field-index-field=name
field-index-name=MyFish:1000Fish-Name.index

# 1.17 2.7 Product-Info Specification

Main text of the Product-Info Specification
Fields defined by the Product-Info Specification

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Starter file for a .Product-Info file of your own

## 1.18 2.7.1 Product-Info Specification: Text

The purpose of Data Transport Markers is to provide explicit delimiters for data that is surrounded by non-database records. The original KingFisher contained a very complex finite state automaton (sic) to extract data out of email and news files. This FSA relied on certain conventions and would fail to work if those conventions were not followed.

In order to enforce a more reliable means to encapsulate and transport data surrounded by irrelevant information, KingFisher 2.3 supports no other format for importing data but that which conforms to the Product-Info specification.

Records must be enclosed by special markers, such as shown in bold in the example below:

```
.BEGIN-FISH-DESCRIPTION
.name
MonkeyCommand
.author
KingKong Industries
.description
Lure the lovestruck monster ape back to his island.
Tools include Fay Wray's torn nightgown, a Fokker
airplane (you get to pilot it), a compass and a map.
.path
FishROM001:games/MonkeyCommand/
.END-FISH-DESCRIPTION
```

Furthermore, the data enclosed must consist of one or more actual database records, and specification for these requires the first field of every record to be the name field as shown above.

KingFisher will read files without Data Transport Markers, such as #?.pi, .Product-Info, or Product-Info files, but no guarantee can and will be made that it can successfully do so with files that start with data not relevant to the desired information.

This represents an added flexibility of KingFisher's parser, not an implied extension to the Product-Info Specification.

According to this Product-Info Specification, KingFisher 2.3 will extract the relevant information from the following sample file (and it does!):

```
Hi Tom,

Remember that monkey game you told my about?

.BEGIN-FISH-DESCRIPTION
.name

MonkeyCommand
.author
KingKong Industries
```

.description

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```
Lure the lovestruck monster ape back to his island.
Tools include Fay Wray's torn nightgown, a Fokker
airplane (you get to pilot it), a compass and a map.
.path
FishROM001:games/MonkeyCommand/
.END-FISH-DESCRIPTION
Well, seems that one wasn't enough and they released
another one. We'll have to figure out how to finally
beat the first one, it seems, before they let us play
the next. Maybe we can look through the binary to find
that code phrase. Here's the text:
.BEGIN-FISH-DESCRIPTION
.name
MonkeyCommand II
.author
KingKong Industries
.description
Keep the captured ape from breaking through the defenses
of the prison that was erected at the conclusion of
MonkeyCommand I. The game consists of coordinating the
actions of four native tribal leaders and their vassals
in repairing the damage done by the angry beast.
.restriction
You need the secret code from the first MonkeyCommand
which you can only get if you won the game.
.path
FishROM002:games/MonkeyCommand2/
.END-FISH-DESCRIPTION
(=:Joe:=)
```

# 1.19 2.7.2 Product-Info Specification: Fields

The following are the fields defined by the Product-Info Specification v6 as designed by Fred Fish and Udo Schuermann.

```
.tvpe
 PURPOSE: A keyword that describes the nature of the program
 FORMAT: Preferrably a single word or two.
 EXAMPLE: Database
 EXAMPLE: Spreadsheet
 EXAMPLE: Animation Player
 EXAMPLE: Animation Tools
 EXAMPLE: Communications
 EXAMPLE: Display Commodity
 EXAMPLE: Mouse Commodity
 NOTES: Avoid abbreviations. Refer to the list below for
     suggestions.
.short
 <<<OPTIONAL>>>
 PURPOSE: A one-line description, preferrably not exceeding
     40 characters in length. This description is to
     give a single-glance insight into the program's
     purpose.
 FORMAT: 1 line only.
 EXAMPLE: Software catalog/search/maintenance tool, multi-user.
.description
 PURPOSE: A full-text description of your program, containing
     anything that is NOT ALREADY available through the
     other fields (see above and below.) The reader
     should gain a good understanding what your program
     can and cannot do. If you mention other programs
     please do not forget to provide a .reference field
     for each such mention.
 FORMAT: Any number of lines, treated as one line.
     Formatting is permitted, but generally discouraged.
 NOTES: Do not indent your text if you choose to format
     your text into multiple paragraphs. Do not use \t
     as a tab. Leave paragraph formatting to KingFisher.
.version
 PURPOSE: The program's version number
 FORMAT:
          MAJOR.MINOR
     1 line only
 EXAMPLE: 37.100
 NOTES:
          Please note that the Commodore guidelines specify
     that the number after the period is NOT a FRACTION
     but rather a WHOLE NUMBER! Thus, the following is
     a valid progression:
       37.1 37.17 37.39 37.100 37.170
     The following are all vastly different versions:
       37.1 37.10 37.100 37.1000
          The format given for this field is really more of a
 NOTES:
     SUGGESTION rather than a RULE. There is no reason
     why you can't store "Today's Version" or "v940205"
     instead of 18.173. In an ideal world everyone
     would use Commodore guidelines, but there are
     enough exceptions.
.date
 PURPOSE: The program's official release date; not the date
```

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it made it into the database.

FORMAT: year.month.day

1 line only

EXAMPLE: 1993.09.27

NOTES: The date format is chosen to be easily sortable.

Note the use of leading zeros in month and day. The full year is to be given in anticipation of

the coming change to a new millenium.

\_\_\_\_\_\_

#### .author

PURPOSE: Any and all authors who have a part in the program FORMAT: Any number of lines, treated as one line (\n in the text will "break up" the line into multiple visual lines.)

EXAMPLE: Joe R. User, Tea Rexx.

EXAMPLE: J. Jones\n

Random Hacker\n

B. Clinton

NOTES: Addresses should be placed in the .address field. There should be only one .address field for each .author field.

If more than 1 .author field is specified, then the same number of .address and .email fields must also be given in a 1-to-1 relationship (i.e. the 3rd .author field must be associated with the 3rd .address, and the 3rd .email field.)

EX: see the example "Joe R. User, Tea Rexx" above; Assume that Joe R. User has long vanished and no known address, but that Tea Rexx has supported the program for a while. If an .address and/or .email field is available for Tea Rexx, then you must specify EMPTY .address and/or .email fields for the author listed BEFORE the ones for Tea Rexx. Likewise, if the two authors names were reversed, you would NOT have to specify blank .address and/or .email fields for the second author. I hope that makes sense.

\_\_\_\_\_\_

### .restrictions

PURPOSE: List restrictions placed upon this program. These should indicate in which way this program has been made dysfunctional (for demo purposes), problems (bugs) known to exist with this program, or any other thing that lets the user know that this program, as seen in this distribution, may not fully satisfy the user in some form.

FORMAT: Free form; see .description for more info.

EXAMPLE: Demo version has SAVE and PRINT options disabled.

EXAMPLE: The ReadOperatorsMind command fails to work with CDTV units. Incompatible with the Discus Ejector utility.

EXAMPLE: Crashes if iconified while loading a sample or image larger than 64K.

EXAMPLE: Requires a PAL display.

EXAMPLE: The program is in German but the documentation offers translations into English and Swahili on a menu-by-menu and gadget-by-gadget basis.

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Do NOT use this field for things like "won't work with KS 1.3" or "won't run with less than 2 Megs of RAM." .requirements PURPOSE: List requirements for your program. These should give the reader enough information to determine if the software will run on his/her system or not. Be sure to specify operating system versions, (hard) disk space requirements, etc. If your program requires any external libraries that are not part of the system software, it would be nice to list them here and comment on whether or not they are included in the archive. If your program is known to run on every existing (Amiga) platform, state this in this field! FORMAT: Free form; see .description for more info. EXAMPLE: 68020, 68030, or 68040 CPU; 3M free RAM; 18M disk space; at least 640x480 display capabilities! EXAMPLE: Requires WB2.1 (V38) EXAMPLE: Requires 1024x768 (or larger) display capability. EXAMPLE: Works only with 4096-channel, 230db BLAZETHUNDER Audio board. EXAMPLE: Requires MUI (MagicUserInterface) version 5. .reference <<<OPTIONAL>>> PURPOSE: Full path to where this program's files are stored, as well as the version that is stored there. FORMAT: 2 lines per reference: the first line specifies the full path (with trailing slash) and the second line, the version. Multiple such fields may be provided to reference previous versions of this program, as well as other programs that might be of interest. The versions should be listed in reverse chronological order and SHOULD include the CURRENT entry. Please note that it is VERY VERY Important that you specify the CORRECT PATH! Without a correct path, this entry will be nearly useless! SPECIFY THE PATH WITH A NEW SUBMISSION ONLY IF YOU KNOW WHERE IT IS STORED; NEW SUBMISSIONS WILL HAVE A PATH ASSIGNED HERE AUTOMATICALLY. YOU SHOULD PROVIDE THE PROPER PATHS TO KNOWN AND EXISTING SOFTWARE. EXAMPLE: FishROM-0002:Productivity/Databases/HomeBase VI/ FishROM-0001:Productivity/Databases/HomeBase VI/ 415.12 .distribution <<<OPTIONAL>>> PURPOSE: Describes the distribution and ownership status of this software. Please see below for a list of common (and recommended!) terms to use.

FORMAT: 1 line
EXAMPLE: Shareware

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```
Please see the table below for descriptions of the
    recommended terms.
.price
 <<<OPTIONAL>>>
 PURPOSE: Describes the cost of this program to the user.
 FORMAT: Any number of lines, treated as one line.
 EXAMPLE: $50(US), DM75.
          In order to make this field more useful, it is
     STRONGLY recommended that the FIRST currency
     listed is United States Dollars as shown in the
     EXAMPLE above. This allows a search to be limited
     to a common price base. If you charge no money
     for this program, omit this field!
.address
 <<<OPTIONAL>>>
 PURPOSE: Describe a full postal address of the author, to
     be used if it becomes necessary or desirable to
     contact the author. Do not specify the author's
                       name, as this is already in the .author field.
          Multiple lines; formatting symbols \n are not
     required, as physical line breaks are equivalent.
 NOTES: SEE THE .author FIELD FOR IMPORTANT INFORMATION
.email
 <<<OPTIONAL>>>
                 Describe a full electronic mail address. Make
 PURPOSE:
     sure that this address is complete and reachable
     even from less well-connected sites. The author
     of KingFisher, for example, can be reached as
     walrus@wam.umd.edu
     It would be an error to specify only "walrus" or
     "walrus@wam" even though these will work within
     the particular organization where this address
     is valid.
 FORMAT: Multiple lines; formatting symbols \n are not
     required, as physical line breaks are equivalent.
     Do not specify more than one email address per
     line. The more you abide by RFC-822 specifications
     the better.
 EXAMPLES: walrus@wam.umd.edu (Udo Schuermann)
     Udo Schuermann <walrus@wam.umd.edu>
     "Udo Schuermann" <walrus@wam.umd.edu>
     <walrus@wam.umd.edu> Udo Schuermann
           You may specify multiple electronic mail addresses
     in order of decreasing reliability and permanence,
     each on its own line.
     SEE THE .author FIELD FOR IMPORTANT INFORMATION
.exectvpe
 <<<OPTIONAL>>>
 PURPOSE: Describe the type of executable(s) that make up
     your program. Examples: 68xxx, AMOS, Script,
     ARexx, Compiled basic, Amigabasic, etc.
 FORMAT: Free form; see .description for more information.
 EXAMPLE: AMOS
```

EXAMPLE: 68000, 68020, and 68040. EXAMPLE: Compiled BASIC EXAMPLE: Compiled ARexx NOTES: AMOS-based software has been said to not work on some systems at all; this entry allows a user to determine if the software is worth obtaining in the first place. .installsize <<<OPTTONAL>>> PURPOSE: Indicate the minimum and maximum sizes of the executable as it is installed. The minimum size should give an indication of how much diskspace is required for a minimal installation (perhaps lacking help files and miscellaneous tools) while the maximum size should indicate the absolutely highest amount of diskspace required by the program. FORMAT: 1 or more lines; Only the first line has a fixed format, the rest are free-form. See examples. Always indicate the number scales with a capital K (for kilobyte) or M (for megabyte) EXAMPLE: 220K - 2M Most of the database files can be kept on floppy disks, so valuable harddisk space is not wasted. EXAMPLE: 18K EXAMPLE: 38K - 500K Lots of documentation and example scripts make up the bulk of the installation. .source <<<OPTIONAL>>> PURPOSE: Describe what source code is available with this program. If source code is not available then omit this field. The .construction field often helps further identify the type of source if you omit details here. How large is the source? FORMAT: Free form; see .description for more information. EXAMPLE: SAS/C, Manx, DICE source (750K) available for \$15 EXAMPLE: Oberon source included. 85K EXAMPLE: Limited C source (15K) included. EXAMPLE: All source plus custom libraries, included: 12MB .construction <<<OPTIONAL>>> PURPOSE: Describe the type of language(s) used to create this program and the methods used to build the final executable. If possible, include the compiler version(s) and possibly important options, such as optimization. FORMAT: Free form; see .description for more information. EXAMPLE: SAS/C++ 6.5 with full optimization. EXAMPLE: AdaEd. EXAMPLE: Fortran with self-made compiler. EXAMPLE: AMOS NOTES: This is usually closely related to the .exectype field but differs from it in that the .exectype

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might be "Compiled C" but the compiler used was "RottenC 0.97"

.tested

<<<OPTIONAL>>>

PURPOSE: Give an indication of which configurations have served as test environments.

FORMAT: Free form; see .description for more information. EXAMPLE: A500(512K Chip, 0K Fast, 1 Floppy), A2000(1M Chip, 2M Fast, 40M HD, 1 Floppy); not tested on 68020+ CPUs.

EXAMPLE: A1000, A500, A600, A2000, A2000/30, A3000, A1200, A4000/30, A4000/40 with various amounts of Chip and Fast RAM, with and without MMU or FPU. Found to be free of Enforcer hits and able to work with virtual memory products; compatible with Retina, EGS/Spectrum, and Picasso software. Also tested under V33 through V40 system software.

\_\_\_\_\_\_

. riin

<<<OPTIONAL>>>

PURPOSE: Specifies how to start the program.

FORMAT: visible=type, command

Where 'type' is either WB or CLI to indicate the required startup environment.

EXAMPLE: HomeBase VI=WB, HomeBase VI HomeBase VI=CLI, ExecuteMe. HB6

HomeBase VI Fixer=CLI, ExecuteMe. HB6Fixer

EXAMPLE: FishTub=WB, ExecuteMe

NOTES: KingFisher requires that this entry strictly follows the above format.

The user is shown all text up to the first equal sign (the 'visible' portion.) The 'type' portion must be terminated with a comma (,) and following it will be the command to be executed. Selecting it will either invoke the program from

the Workbench (invoking it as if double clicked on its icon (if the .info file exists), or execute the indicated shell command line as if it has been typed at an open console window.

.docs

<<<OPTIONAL>>>

PURPOSE: List all documentation files, possibly for viewing

from within KingFisher for more detailed info.

FORMAT: 1 line per file EXAMPLE: HomeBase.guide HomeBase.dvi HomeBase.doc

NOTES: KingFisher examines the EXTENSION and invokes the

appropriate viewing tool: MultiView/AmigaGuide for .guide files, ShowDVI for .dvi files, more for

anything else. These files can also be sent to the

printer via KingFisher (i.e. print .ps or .doc files.) KingFisher will honor the PAGER environment variable (defaults to 'more') to display standard text.

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```
Omit any path to these files, unless it is a
     relative path from within the program's CD-ROM or
     disk directory. Do not specify these files if
     they are located within archive files; remember:
     the files must exist as they are given here!
.described-by
 <<<OPTIONAL>>>
 PURPOSE: Specifies who created the description (Product-Info
     file) for the program.
 FORMAT: Free form; should include an electronic mail
     address, too, if available.
 EXAMPLE: Fred Fish (fnf@fishpond.cygnus.com)
 EXAMPLE: Udo Schuermann <walrus@wam.umd.edu>
.submittal
 <<<OPTIONAL>>>
 PURPOSE: Identifies who submitted the program to Fred or
     else how this program came to be on the reference
     disk.
 FORMAT:
          Free form; usually one line.
 EXAMPLE: Submitted on disk directly by the author.
 EXAMPLE: Downloaded from wuarchive.wustl.edu in pub/aminet/util/misc
.stored-in
 PURPOSE: Specifies where and especially HOW the application
     is stored. This field should specify EITHER the
     name of a directory (ending with a : or a /) OR the
     name of a file (one that does NOT end with : or /)
 FORMAT: 1 or more lines.
 EXAMPLE: FF1000:Disks701-1000/Disks941-960/Disk950/Enforcer/
     FF1000:BBS/Disks501-1000/Disks941-960/Disk950/Enforcer.lha
           It is up to the particular application to decide
 NOTES:
     how to handle this information. If the extension
     on the file is .lha, .lzh, .Z, .zoo, .pak, .zip,
     etc. then you could, for example, call upon the
     archiver of choice to unpack the application into a
     temporary directory and let the user run the
     program or list the files, or whatever.
```

## 1.20 2.7.3 Starter .Product-Info

```
INSTRUCTIONS: Using MultiView/AmigaGuide's SAVE AS command (menu ← ), write

this page to a file. Call it .Product-Info. Fill in what you need based

on the description of

Fields

given in the previous section. Not all

fields are required, and some may need special formatting.

Ship the resulting file with your product!

Acceptable names for the file (in increasing order of desirability) are:

.Product-Info
```

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```
Product-Info
 myproject.pi
------ (Delete this line and all text above)-----------
.name
Program's Name
.fullname
Long/full name, if any
.type
Type of program (see below)
.short
Short (40 character) description, à la Aminet
.description
Long, possibly quite verbose description
.version
Release. Version
.date
Release date (yyyy.mm.dd)
.author
Author's name
.restrictions
Restrictions (perhaps crippleware info)
.requirements
Special requirements (such as MUI)
.reference
Reference to other related programs, two lines each (1: path, 2:version)
.distribution
Distribution type (see below)
.price
Price (if any)
.address
Author's postal address (not including author's name)
.email
Author's email address
.exectype
ARexx, shell script, binary, interpreted BASIC, ...
.installsize
How big is this thing, approximately?
.source
Type (language) of source code, if any
.construction
How built? AMOS, SAS/C, DICE, Modula-2, Oberon, Assembler, ...
Tested on what type of systems
.run
See above
.docs
Filenames of documentation
.described-by
Who wrote this description?
-----(Delete this line and all text below)------
Suggested keywords for the TYPE field:
  Action Game
              Animation
                          Animation Player
  Animation Tool
                  Archiver
                              CLI Tool
  Communications Compiler
                             Compression
  Database Disk Tool Display Commodity
```

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Drawing Image Conversion Image Processing
Library Mouse Commodity Music Composition
OS Utility Painting Picture
Printing Sound Analysis Sound Editing
Sound Playing Spreadsheet Strategy Game
Text Text Editing Text Viewer
Thinking Game Word Processing Workbench Tool

Keywords for the DISTRIBUTION field:

Commercial Commercial software is owned and distributed through licenses. It costs money to individual end-users and is not freely distributable.

SUCH PIECES SHOULD NOT APPEAR ON DISKS THAT ARE MEANT FOR FREELY DISTRIBUTABLE SOFTWARE!

Commercial Demo Represents a demonstration of a commercial package. As such, commercial demos are freely distributable and may have limitations as described in the .limitations field.

Shareware Such software is owned and copyrights are held by the author(s). The software may be distributed freely, but not sold for profit, of course. Shareware often specifies a limit of some time after which you are requested or required to register the software (i.e. pay for it.) This provides you with the means to evaluate the software thoroughly before paying for it.

Freeware Such software is owned and copyrights are held by the author(s). The software may be distributed freely, but not sold for profit, which would mean the software is no longer FREEware. No payments are required for such software.

Public Domain Software labeled PD (Public Domain) belongs to the public, i.e. ANYONE. Some people release their software into the public domain with the mistaken idea that they can continue to own and control the program. Not so. Software that is labeled Public Domain (or said by the author to be released into the public domain) truly belongs to anyone and everyone. It is quite legal for someone to take such a program and sell it for profit as is. Likewise, it it perfectly acceptable to modify public domain software to build a better product (or whatever) out of it and then sell it for profit.

GNU Public License The terms and conditions of this license are long and not easily reproduced here. Suffice to say that software released under the GNU Public License cannot be sold for profit and must be distributed with source code. They are not

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public domain, however.

### 1.21 2.8 KingFisher Tooltypes

KingFisher first processes the contents of the KingFisher2.prefs  $\leftarrow$  file for

which it looks in the current directory first, then in ENV:KingFisher/ and last in S:

Once this file has been processed, KingFisher will process command line arguments (if invoked from the CLI) or Icon Tooltypes (if invoked from the Workbench.) The format of both tooltypes and CLI arguments are the same, and can be anything you find in the KingFisher2.prefs file (which is written each time you quite KingFisher) as well as the following:

SERVERNAME=volume:path/KFServer

If the

KFServer

is not currently running, KingFisher will attempt to start it by running "KFServer" in the current directory. If this is not how you have configured your system (the installation script set up things this way, so you ordinarily should not have to worry about this) then you must specify the full path and filename of the KFServer executable.

Notice that the supplied script (available from the Workbench, too) named KFDown queries the standard c:STATUS command for a process with the name 'KFServer.' If you start KFServer with a specific path, then KFDown will no longer be able to shutdown the KFServer as you might expect. There are several solutions to this, if KFDown is a tool you expect to make use of (you don't have to):

- 1. Modify KFDown to invoke KFServer with a QUIT parameter instead of sending the CLI process a break signal,
- 2. Modify KFDown to query the c:STATUS command with the full path of KFServer.

#### NOOUTPUT

A flag that tells KingFisher not to print the initial copyright and welcome banner. When invoked from the Workbench this banner causes a console window to open, which may well be undesirable. This option is set by default in the icon supplied with KingFisher.

#### 1.22 2.9 Differences from KF 1.40

you are a user of KingFisher 1.40 or earlier. There are some important changes that may not be always apparent:

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#### The obvious:

• KingFisher 2.3 requires V37 (KS 2.04) of the system software. If you are using an old softkicked 2.0 Kickstart (V36) then you must upgrade to the production version of Kickstart 2.04 before you can use KingFisher. KingFisher 2.3 is also fully compatible with Kickstart 3.1 (V40) and makes use of some 3.1 features, if available.

- KingFisher now opens a resizable window on the default public screen and uses that screen's text font (which can be proportional) for all gadgets and menus.
- The original KingFisher recolored the Fish Selection (browse) gadgets yellow when they served as Search gadgets. This was far from ideal and has now been corrected: a separate set of Search Gadgets has been introduced.

#### The not-so-obvious:

· When used with CD-ROM databases, the Previous/Next Disk gadgets will be ghosted, as a CD-ROM consists of only a single disk. The default

Display Format

includes a STORED-IN field, which will allow you to determine where on a CD-ROM the software is stored. If it references data that is part of Fred's Fish Disk collection, then you will notice a path similar to ...f9/ff951/... which references Fish Disk 951.

Search expressions

have a new syntax so you can reference information from individual database fields. Briefly, this requires you to specify the name of the field plus an operator symbol (such as =, !=, \$, etc) before the operational value. If you find this format too cumbersome and its functionality more than you need, you can switch KingFisher to use the older KingFisher 1.40 expression syntax with the Search Preferences menu item

Simple substrings

 Instead of a fixed number of Search Expression gadgets, KingFisher now maintains a behind-the-scenes history of expressions from which you can select with the

Search Expression History gadget.

 KingFisher Release 2 will no longer recognize the old "Add Fish" format used by Release 1. Instead it recognizes only the format specified by the new

Product-Info Specification v6 which has specific provisions

for storing database records so that they can be extracted  $\mbox{from within}$  other text. KingFisher's

Export

command can be configured to either

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use the Export Format (to be used in a document or letter, for example) or this re-importable format which is recognized by any Product-Info compliant software. The

Use importable raw format Export Preferences

menu permits this switch.

 KingFisher Release 1 would highlight the keywords in the displayed text when a search found a record. As Release 2 now uses standard GadTools gadgets rather than a "home-cooked" listview (with all its limitations) this functionality has been lost. I cannot project if and when it will be implemented again.:(

Further details are treated in the Concepts section.

### 1.23 3 MENUS

Project

Edit

Search

Preferences

Help

# 1.24 The Project Menu

Help (index)

About KingFisher

Server status

Open database

Define database

Print

Release printer

Export

Close export file

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Quit

### 1.25 The Edit Menu

Append fish from file

Append fish from tree

Delete fish

Edit expression

Edit search masks

Edit version links

## 1.26 The Search Menu

Select expression

Search backward

Search forward

Load search set

Save search set

## 1.27 The Preferences Menu

Global

Auto-save on exit

Confirm quit Display

Load custom display format

Drop custom display format

Custom screen

Default public screen

Center main window Printing

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Load custom print format

Drop custom print format

One fish per page

Avoid page breaks

Add index info Exporting

Load custom export format

Drop custom export format

Choose export file

Use importable raw format

Add index info Searching

Stop on each match

Case sensitive

Trim blanks

Simple substrings

Use search masks

Save Preferences

# 1.28 The Help Menu

Help (index)

Using KingFisher

Searching

Printing

Exporting

Databases

# 1.29 PROJECT/About KingFisher

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Presents an image of the KingFisher logo as well as copyright  $\hookleftarrow$  information for the software. Also given will be the registration site most likely to apply to you.

The same window will always appear when you first start KingFisher. It will go away by itself only if it is not deactivated.

Language translations:

Dansk (Danish) Finn Kettner <flynn@scala.ping.dk>
Deutsch (German) Uwe Schürkamp <hoover@mathematik.uni-bielefeld.de>
Nederlands (Dutch) Marcel Offermans <marcel@dutw30.tudelft.nl>
Suomi (Finnish) Janne J Kalliola <plastic@vipunen.hut.fi>

#### 1.30 PROJECT/Status

Requests from the server some information, which includes an estimate of what percentage of the server's total time your client has taken. If you sit idle, that percentage will decrease. It also specifies which database you have open.

### 1.31 PROJECT/Open Database

Requests from the server a listof all available databases. This is a list of the descriptions in all files with the extension .kfdb that the server knows about. The server can see these files only in its default directory.

You get to select one of these databases based on the description for the database as stored in the .kfdb files. KingFisher will save the position in your current database and activate the newly selected database, moving to the most recently visited record in that database.

The window that lists you all the available databases becomes far more useful when you have more than one or two databases available to you.

You can cancel the selection by closing the window.

### 1.32 PROJECT/Define Database

NOTE: This command is not yet available. The following is what  $\mbox{\ensuremath{\ensuremath{\wp}}}$  you need to know to setup your own database, manually:

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KFServer can only serve databases that are defined by the contents of files with a .kfdb extension. The exact name of this file is immaterial but it is always a good idea to use a sensible name. Let us setup a database for your Amiga Club, using a single file to store all the information, named ClubDisk:Club.data, and an index file for it named ClubDisk:Club.index:

The name of the KingFisher Database file shall be AmigaClub.kfdb

Let us create this file with the following contents. You can use any standard text editor for this task:

database-name=Our Ourstanding Amiga Club's Own Software Collection
section=00000,99999,ClubDisk:Club.data
index=inram
index-increment=100
index-name=Club.index

For more information on these individual items, please see the KFServer section.

#### 1.33 PROJECT/Print

Using the currently active print format (default or custom),  $\ \ \leftarrow$  KingFisher

will print data to the printer. If you print from the main window's menu, KingFisher will print only the current record. If you print from the "Caught Fish" window that displays all matching records in the

Search Set

, then KingFisher will print all records in the search set.

Notice that printing is configurable with the options of the  $$\operatorname{\textbf{Printing}}$$  Preferences menu.

## 1.34 PROJECT/Release printer

This entry is active only when KingFisher has printed something, after which it will retain "ownership" of the printer device awaiting more print commands. Using the Release printer command returns the printer to the system and tells KingFisher that you are done with printing for the moment.

The current page in use will be ejected by this command.

### 1.35 PROJECT/Export

Using the currently active export format (default or custom),  $\leftarrow$  KingFisher will write data to the export file. If you export from the main window's

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menu, KingFisher will write only the current record. If you export from the "Caught Fish" window that displays all matching records in the

Search Set

, then KingFisher will write all records in the search set.

Notice that exporting is configurable with the options of the

Exporting

Preferences menu.

If exporting is set to

Use importable raw format

, then neither the

default, nor the custom format will be used, and instead KingFisher will write a file that can be re-imported through the

Append fish from file command.

## 1.36 PROJECT/Close export file

This entry is active only after KingFisher has exported something and is keeping the file open and ready for further additions through the Export command. Using the Close export file command closes the file and allows you to access it through other software.

### 1.37 PROJECT/Quit

The Global Preferences submenu item Confirm quit

allows you to specify

whether or not you wish KingFisher to ask you if you really want to quit. If you find yourself frequently quitting KingFisher without meaning to, you should turn that option on. If the "Really quit KingFisher" requester goes on your nerves, turn the option off.

If you also have the

Auto-save on exit

option disabled, you must make

this change permanent by selecting

Save Preferences

## 1.38 EDIT/Append fish from file

The file you specify may contain one or more records. The  $\ensuremath{\hookleftarrow}$  records must

conform to the

Product-Info Specification v6

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The index is automatically updated (and saved to disk when the database is closed.)

## 1.39 EDIT/Append fish from tree

Scans a directory tree for #?.pi, .Product-Info, and Product-Info files and adds their contents to the database. A status window keeps you informed of progress. You can interrupt the scan by closing the status window; you must confirm such an action before the scan is actually aborted.

The index is automatically updated (and saved to disk when the database is closed.)

### 1.40 EDIT/Delete fish

Truncates the database by deleting the current fish (record) and all that follow. You must confirm the action before it will take place.

That database files themselves are not (at this time) physically altered. Only the index is altered (and this change made permanent when the database is closed.)

### 1.41 EDIT/Reconstruct database index

This command doesn't exist yet.

#### 1.42 EDIT/Pack database

This command doesn't exist yet.

#### 1.43 EDIT/Edit custom format file

Use of this command will suspend KingFisher until you are finished with it. Selecting an existing (or new) .format file will then load this file into your favorite text editor and allow you to alter it.

If the environment variable EDITOR is not set (i.e. 'ENV:EDITOR' does not exist) then KingFisher will use 'c:ED' instead to edit the .format file.

NOTE: If you edit the display format file currently in use by KingFisher, you must manually reload this file. The next release of KingFisher will use file notification to assure that any alteration to the file (even when not modified with KingFisher's knowledge) will automagically update the display.

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# 1.44 EDIT/Edit search expression

Edit the current search expression.

#### 1.45 EDIT/Edit Masks

Search Masks allow you to explicitly exclude certain records,  $\ \leftarrow$  depending on

what "Flag Bits" they have set. The Search Masks are used only if you have selected the

Use Search Masks option.

There are two separate Search Masks:

Avoid Mask

This mask is used to completely eliminate a record from the search. Any record (fish) that has any of these flags set, will be excluded. By default this includes all records with the Deleted (D), Owned (O), and Hidden (H) flags.

Match Mask

This mask is used to choose from those records not already eliminated by the Avoid mask. Only records are chosen which have one or more of these flags set.

NOTE: Fish (records) without any flags set cannot be located with a Search Mask in use!

Why two search masks?

The Avoid mask allows you to specify which records you definitely don't want to see, while the Match mask handles the remainder. This provides greater flexibility. If KingFisher had only the Match mask, you would not be able to eliminate records from your search which have been marked for deletion, been marked hidden, or those you marked as already in your collection (owned.)

Click

here

to learn about the meaning of each flag.

#### 1.46 EDIT/Edit Links

This command directly modifies the Version Links that KingFisher  $\,\longleftrightarrow\,$  uses when

you click on one of the

Version Browse

gadgets. The window that opens up

contains two numeric gadgets, one for the preceding, and another for the following link.

1. Select this command for the program whose Version Links you wish to

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modify.

2. Use any other function in KingFisher to locate the matching preceding or following version to the current program,

- 3. Press the "Current" gadget or enter the appropriate record number,
- 4. Repeat steps (2) and (3) for the other link (if necessary)
- 5. Click on "Accept" to write the selections to the database or "Cancel" to not keep the changes you made.

The Edit Links command is not available when the current database cannot be modified (stored on read-only media or the index is write protected.)

## 1.47 EDIT/Copy to clipboard

This command doesn't exist yet.

## 1.48 EDIT/Append from clipboard

This command doesn't exist yet.

# 1.49 EDIT/Choose clipboard

This command doesn't exist yet.

## 1.50 EDIT/Clear clipboard

This command doesn't exist yet.

## 1.51 SEARCH/Select Expression

If one or more Search Expressions have been used before, you can select one of them to be placed into the Search Expression gadget and used for the next search you begin.

#### 1.52 SEARCH/Search backward

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Begins a search in reverse direction. The Stop on each match option

determines if the search will stop as soon as a match is found, or if it should continue to build up a Search Set consisting of all fish (records) that match the expression.

You can interrupt a search by closing the Search Status window.

Notice that you can press the "<" key as a short cut for this command.

#### 1.53 SEARCH/Search forward

Begins a search in forward direction. The Stop on each match option

determines if the search will stop as soon as a match is found, or if it should continue to build up a Search Set consisting of all fish (records) that match the expression.

You can interrupt a search by closing the Search Status window.

Notice that you can press the ">" key as a short cut for this command.

### 1.54 SEARCH/Load search set

Loads a new Search Set

. Any Search Set that you have currently loaded will be cleared and is lost if it has not been saved.

When a Search Set is loaded, KingFisher may switch to the database to which the search set applies, and will also store the Search Expression to the Expression gadget to give you an idea what the Search Set means.

While loading the Search Set, KingFisher will retrieve some information from the appropriate database to be shown to you in the Search Set Window. This process requires KingFisher to read from the database. Larger Search Sets may not, therefore, seem to load instantly.

If your Search Sets are not given the extension .search on disk, then you must alter the ALS File Requester's Pattern field from the default pattern #?.search to something closer to your needs.

## 1.55 SEARCH/Save search set

Saves the current
Search Set
to a file on disk so it can be retrieved

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later, thereby saving you the time and effort of executing another search and having to wait for the result again. Search Sets require approximately 5 bytes per record on disk, so that 100 matching requires will not require more than approximately 500 bytes on disk.

If you give you search sets the extension .search, then KingFisher will automatically show you existing Search Sets when you load a Search Set!

#### 1.56 PREFERENCES/Global

This submenu allows you to somewhat alter KingFisher's behavior:

Auto-save on exit

When checked, automatically saves all settings when you exit.

Confirm quit

When checked, requires confirmation before actually quitting.

#### 1.57 PREFERENCES/GLOBAL/Auto-save on exit

If you enable this option, then KingFisher will automatically  $\hookleftarrow$  store all

settings to the KingFisher2.prefs file in the default directory, or the file named by the  ${\tt SETTINGS}$ 

tooltype

, or the first file it finds while

looking in the default directory, then ENV: KingFisher/, and then S:

If you turn off this option and wish this change to become permanent, then you must use the

Save Preferences

command, otherwise your change will not

be saved when KingFisher exits!

## 1.58 PREFERENCES/GLOBAL/Confirm quit

Do you hate software that just always asks you if you really want to quit, and you hear yourself mumbling "Of course, I'm sure!"

Do you tend to click on the close gadget and then find yourself saying "oops!" but it's too late?

Whichever of these questions describes you, with the "Confirm quit" option you can get KingFisher to behave the way you want it to!

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## 1.59 PREFERENCES/Display

This submenu allows you to define display-related things:

Load custom display format Loads a display format that you have defined and stored in a  $\leftarrow$ 

Drop custom display format

Reverts to the internal default display format.

Custom screen

Opens KingFisher's window on a custom screen of your own  $\ \hookleftarrow$  choosing.

Default public screen
Opens KingFisher's window on the default public screen.

Center main window KingFisher's window opens initially in the center of the display  $\hookleftarrow$ 

## 1.60 PREFERENCES/DISPLAY/Load custom display format

The internal default display format is merely one way of displaying the information in the database. Different types of databases, in fact, may require different display formats.

Custom display formats are kept in files on disk, and KingFisher remembers the display format in use for every database.

To remove a custom display format and revert to the builtin default, select the

Drop custom display format command.

To create or edit a custom format, use Edit custom format file

# 1.61 PREFERENCES/DISPLAY/Drop custom display format

This command is available only when a custom display format has been loaded. It removes a previously selected custom display format and reverts back to the builtin default.

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#### 1.62 PREFERENCES/DISPLAY/Font

You may select any font for KingFisher to use. Be advised that KingFisher cannot yet fall back to a smaller font if you select an unreasonably large font.

The font you select may be either fixed or proportional.

#### 1.63 PREFERENCES/DISPLAY/Custom screen

This option will only work if you are running Kickstart 2.1 (V38)  $\leftrightarrow$  or later

because it uses the Screen Mode Requester from the V38+ ASL Library. If you are still running Kickstart 2.04 (V37) click

here

for assistance in

building getting KingFisher Release 2 to open on a custom screen.

## 1.64 Getting KingFisher to open on a custom screen under V37

First of all, quit all copies of KingFisher so that your changes to the KingFisher2.prefs file are not accidentally overwritten again when you later quit the program.

You need to edit the KingFisher2.prefs file and locate the "Screen" item, which should be one of the very first ones listed. The following example uses a PICASSO:1024x768 screen with 256 colors:

Screen=CUSTOM: 40020006, 1024w, 768h, 8d, 1

Notice that the first portion of the Screen specification is "CUSTOM:" If anything else shows up in the first 7 characters, then KingFisher assumes that you are actually specifying the name of a specific public screen, rather than a custom screen specification.

The next item, "40020006" is a hexadecimal representation of the screen mode ID from the Display Database. The following are standard values that you can use as a starting point.

| Mode ID  | Resolution | (PAL)  | Description            |
|----------|------------|--------|------------------------|
| 0008000  | 640 x 200  | (256)  | Hires                  |
| 00008004 | 640 x 400  | (512)  | Hires-Interlace        |
| 00008020 | 1280 x 200 | (256)  | SuperHires             |
| 00008024 | 1280 x 400 | (512)  | SuperHires-Interlace   |
|          |            |        |                        |
| 00039020 | 640 x 480  |        | Productivity           |
| 00039024 | 640 x 960  |        | Productivity-Interlace |
|          |            |        |                        |
| 00041000 | 1008 x 800 | (1024) | A2024-10Hz             |
| 00049000 | 1008 x 800 | (1024) | A2024-15Hz             |
|          |            |        |                        |
|          |            |        |                        |

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The next three items, "1024w", "768h", and "8d" are probably quite obvious to you: they are the width, height, and depth of the screen. The letters that follow the numbers are stored in the file only to more easily describe their purpose. The trailing "1" indicates that autoscrolling is enabled for the screen ("0" disables it.)

Here is an entry for an  $800 \times 600$  Hires-Interlace NTSC screen using 4 colors (2 bitplanes) and with autoscroll enabled:

Screen=CUSTOM:00008004,800,600,2,1

### 1.65 PREFERENCES/DISPLAY/Default public screen

Choosing this item causes KingFisher to open on the default public screen. If you have no public screens open, then the Workbench is the default public screen.

#### 1.66 PREFERENCES/DISPLAY/Center main window

KingFisher always remembers the position on the screen where its window was last located. If you often work with public screens of varying sizes, you might rather have KingFisher always open in the very center of the screen.

This option is used only when KingFisher's main window is first opened. It has no immediate effect when you select it from the menu.

## 1.67 PREFERENCES/Printing

This submenu allows you to define printing-related things:

Load custom print format Loads a print format that you have defined and stored in a file.

Drop custom print format
Reverts to the internal default print format.

One fish per page Prints no more than one fish (record) per page.

Avoid page breaks Starts a new page if a record no longer fits on the current page  $\hookleftarrow$ 

Add index info

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Adds information from the index to each printed record.

## 1.68 PREFERENCES/PRINTING/Load custom print format

The internal default print format is merely one way of  $\hookleftarrow$  formatting the

information in the database for the printer. Different types of databases, in fact, may require different print formats.

Custom print formats are kept in files on disk, and KingFisher remembers the print format in use for every database.

To remove a custom print format and revert to the builtin default, select the

Drop custom print format command.

To create or edit a custom format, use  $\hbox{ Edit custom format file }$ 

# 1.69 PREFERENCES/PRINTING/Drop custom print format

This command is available only when a custom print format has been loaded. It removes a previously selected custom print format and reverts back to the builtin default.

## 1.70 PREFERENCES/PRINTING/One fish per page

By enabling this command, each record (fish) is printed  $\leftarrow$  beginning at the

top of a new page.

This command is unavailable while the printer is in use by KingFisher. You need to first

Release printer before you can change these settings.

## 1.71 PREFERENES/PRINTING/Avoid page breaks

The effect of this command is, perhaps, most easily described at  $\,\,\leftrightarrow\,\,$  hand of a

little diagram to compare the effect visually. The idea is to prevent descriptions from being broken up by page breaks, forcing a record which will not fit on the current page to begin at the top of the next page:

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| NO A  | void page breaks   | YES A                | void page breaks  |
|-------|--|----------------------|---|
| Vers: | KingFisher   2.0   blah blah blah blah blah blah blah blah | Vers:                | KingFisher   2.0   blah blah blah blah blah blah   blah blah  |
| Vers: | MonkeyCommand   1.0   blah blah blah   blah.               | Vers:                | MonkeyCommand   1.0   blah blah blah   blah.                  |
| Vers: | MonkeyCommand   2.0   blah blah blah                       | ,<br> <br> <br>      | <br> <br>   |
|       | blah blah blah   blah blah blah.  B5-Images                | Vers:                | MonkeyCommand   2.0   blah blah blah blah blah blah blah blah |
|       |  | <br> Name:<br> ::::: | <br>  B5-Images  <br>   |

This command is unavailable while the printer is in use by KingFisher. You need to first

Release printer before you can change these settings.

### 1.72 PREFERENCES/PRINTING/Add index info

Index information is added to the printout for each record in the  $\ensuremath{\hookleftarrow}$  following

format:

.INDEXINFO=|DISK=1|FISH=17|FLAGS=8001|

This format will become a standard for a future Product-Info Specification and will be recognized by KingFisher's "Add Fish..." command.

This command is unavailable while the printer is in use by KingFisher. You need to first

Release printer before you can change these settings.

# 1.73 PREFERENCES/Export

This submenu allows you to define exporting-related things:

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Load custom export format Loads an export format that you have defined and stored in a  $\leftrightarrow$  file.

Load custom export format

Reverts to the internal default export format.

Export filename
Specifies a (new) file to which exported records are written.

Use importable raw format  $\text{Uses a format which the Append fish from file command } \leftarrow \\ \text{understands.}$ 

Add index info Adds information form the index to each exported record.

## 1.74 PREFERENCES/EXPORTING/Load custom export format

The internal default export format is merely one way of  $\hookleftarrow$  formatting the information in the database for export files. Different types of databases,

information in the database for export files. Different types of databases, in fact, may require different export formats.

Custom export formats are kept in files on disk, and KingFisher remembers the export format in use for every database.

To remove a custom export format and revert to the builtin default, select the

Drop custom export format command.

To create or edit a custom format, use  $\hbox{ Edit custom format file }$ 

Note that the

Use importable raw format option, overrides the custom export format completely.

### 1.75 PREFERENCES/EXPORTING/Drop custom export format

This entry will only be available if you have a custom  $\hookleftarrow$  export format

loaded. It will drop the custom format and revert back to the default. Note that the use of the

Use importable raw format

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option overrides the use of custom or default formats entirely.

## 1.76 PREFERENCES/EXPORTING/Export filename

By default, the export filename, if you never specify a different  $\hookleftarrow$  name, is

t:KF2.output. If you prefer a different filename, this command will let you do so, and KingFisher will remember the name between sessions. An implicit

Close export file will be issued for you.

## 1.77 PREFERENCES/EXPORTING/Use importable raw format

Forces the output to be in a special, re-importable format. The  $\hookleftarrow$  file can

be transmitted via electronic mail (although national characters may not be preserved by the email transmission!) and can be added to any KingFisher 2.3 database through the Edit menu's

Add fish from file command.

Notice that while this option is selected any custom export format is effectively disabled.

#### 1.78 PREFERENCES/EXPORTING/Add index info

Index information is added to the export file for each record in the following format:

.INDEXINFO=|DISK=1|FISH=17|FLAGS=8001|

This format will become a standard for a future Product-Info Specification and will be recognized by KingFisher's "Add Fish..." command.

## 1.79 PREFERENCES/Searching

This submenu allows you to define searching-related things:

Stop on each match When checked, stops on each match; otherwise builds a Search Set  $\hookleftarrow$ 

Case sensitive

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When checked, upper and lower case characters become distinct.

Trim blanks

When checked, will remove trailing blanks from search strings.

Simple substrings

When checked, uses the simpler KingFisher 1.x expression syntax.

Use Search Masks

When checked, uses the search masks defined by Edit Search Masks

From here, you can also learn more about Search Expressions

### 1.80 PREFERENCES/SEARCHING/Stop on each match

When you begin a search, KingFisher examines this option to see if  $\hookleftarrow$  you wish

it to stop immediately whenever it finds a match. If this option is not enabled, KingFisher will build a

Search Set

instead, presenting you with

the final list of all matches, which you can save permanently, and from which you can choose randomly.

#### 1.81 PREFERENCES/SEARCHING/Case sensitive

When this option is enabled, upper and lower case letters are treated as distinct symbols, so that "a" is not the same as "A". If, for example, you are looking for references to Kickstart and your search string consists of "KS" (abbreviation for Kickstart) you might be looking explicitly for only the all upper case version, and have no desire to locate words like these, too: ticks or packs.

#### 1.82 PREFERENCES/SEARCHING/Trim blanks

When blank spaces are typed into a string gadget, at the end of a string, they are usually quite invisible and difficult to detect. Their presence, however, can produce rather puzzling results because they may end up being considered part of a string constant in your expression!

Enabling this command will guard against such troubles by removing all blank spaces from the end of your expressions. This option will cause you problems if you are looking for a string such as "fred " (i.e. when you really do want a blank space at the end of a string) but the average case may be satisfied better by turning this option on.

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# 1.83 PREFERENCES/SEARCHING/Simple Substrings

If the Simple Substrings option in the Searching Preferences is selected, KingFisher will automatically supply a field and operator selection of "\*\$" to your search strings, so that the substrings you provide in the style of KingFisher release 1 expressions are treated as substrings and scanned for in every available field of the database records that will be examined during a search.

#### 1.84 PREFERENCES/SEARCHING/Use search masks

Edit Search Masks

command in order to eliminate certain types of records

from the search.

## 1.85 PREFERENCES/Save Settings

Saves all settings to a file of your choosing. Unless given a  $\hookleftarrow$  specific

filename with the SETTINGS

tooltype

at startup, KingFisher for the

following files from which to read its settings:

KingFisher2.prefs (in the current directory)

 ${\tt ENV: KingFisher/KingFisher2.prefs}$ 

S:KingFisher2.prefs

If it finds one of these files, it will attempt to writes its settings back to this file when you exit (provided the

Auto-save on exit

option is

enabled) or to the first file in that list (i.e. in the default directory when none of these files have been found.

You can save settings with this command to any file of your choosing but KingFisher will not be able to find and actually use the file unless you are saving it according to the above specifications.

## 1.86 HELP/Using KingFisher

KingFisher uses a Graphic User Interface (GUI) to allow you  $\hookleftarrow$  to easily

browse through one or more databases. The individual gadgets are usually referred to by a name which is most easily presented at hand of a picture which you can view by clicking here or by viewing the KF-GUI.iff image

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with an external viewer.

The gadgets in the upper left corner allow you to select a particular record in the database (if the cycle gadget is set to "Fish") or jump to the first record on any particular disk. Notice that the database must actually contain multiple disks. A CD-ROM is a single disk and rarely organized into multiple disks, so the Disk number will never change from 1, which also affects some other functions of KingFisher.

The gadgets in the upper right corner are

flags

which are particular to

each record in the database. The first row of these gadgets is defined by KingFisher, to provide you with flags to mark records as DELETED, OWNED, or HIDDEN, or MARK them for later retrieval. The gadgets with numbers in them are for you to define.

The three pairs of gadgets in the lower left are the browsing gadgets that permit you to jump through the database either from one disk to the next (unavailable if the database records the contents of only a single disk) or by record (fish.) The pair between these two are the VersionLink gadgets, which allow you to select previous or later versions of the displayed entry if such version links have been set in the database.

If a record has no previous or following versions stored in its internal version link fields, then these gadgets will be unavailable (ghosted.) A future version of KingFisher will allow you both to edit the links directly and select functions that perform analysis on the database to build the links automatically.

The lower right corner has search tools at your disposal. The Expression gadget stores the currently active  $\frac{1}{2}$ 

Search Expresssion

which is compiled

when you select one of the two Search Gadgets (the arrow gadgets that also have question marks in them) to initiate a search.

KingFisher maintains a history of the most recently used search expressions. You can select from this list by pressing on the gadget with the artistically deficient image of an open book. This will open a little window with previously used search expressions. Click on one of these to have it automatically placed into the Expression gadget. You can press the Escape key to cancel the selection window.

Whenever you initiate a search, KingFisher examines the state of the  $\ensuremath{\mathsf{S}}$ 

Stop on each match

Search Preferences menu to determine if you want

KingFisher to stop immediately when it finds a match or instead scan the whole database before presenting you with a window from which you can select from among multiple matches. When the "Stop on each match" entry is not checked, such a

Search Set

is built. These Search Sets can be stored

on disk and later retrieved to save you the time to perform the same search over and over again. To open and close the Search Result window, which contains a representation of the Search Set, click on the gadget with the images of

Fred Fish's Fish Logo
(fish bones.)

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The center piece of the GUI is a so-called "listview" which is a scrolling display of text, describing the current fish (record.) The vertical slider at the right edge lets you scroll through the text.

Here are some neat things you may not realize at first:

- You can resize KingFisher's window to make it as large as you like or as small as various GUI elements allow.
- You can run multiple copies of KingFisher, perhaps two or three to search with, and another to continue browsing through the database.
- Each copy of KingFisher can access a different database. You could run two copies of KingFisher to search two different databases, and scan a third with yet another copy of KingFisher.
- You are not restricted to the display, print, and export formats that KingFisher uses by default. You can define your own

Custom Format

in

a file and KingFisher will remember which database uses which custom formats!

# 1.87 HELP/Searching

The simplest way to search the database is by browsing  $\leftarrow$  through it one

record at a time. Unless you are exceedingly patient and have too much time on your hands, you are best served by expressing to KingFisher what you are looking for:

 In the lower right corner of KingFisher's window you will find a string gadget. Into this string gadget you should enter a Search Expression

By altering the

Simple Substrings

option, you can make KingFisher use

the older and simpler substring expressions. These, however, do not offer you the same flexibility as the new expressions.

Instead of entering an expression, you can also click on the gadget that is supposed to look like an open book, provided that this gadget is not ghosted. This will open a listing of previously used expressions from which you may select one by clicking on it.

2. Once you have an expression typed into the Search Expression Gadget, you should click on one of the directional gadgets that have a question mark (?) as part of the design. This initiates a search.

If you receive an error requester instead, examine the message and make what corrections are necessary to produce a syntactically correct search

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expression

3. You can search for one matching record at a time or have KingFisher scan the entire database and collect all matching records into a list that it then presents to you. If you expect many records to match your criteria you may wish to disable the

Stop on each match option.

The great advantage of not stopping on each match but instead building a

Search Set

is that you can click on each item in the list to instantly view the record. In addition, you can save the Search Set to a file on disk and retrieve it later, thereby saving yourself the time required to search the database once again.

4.

Other options are available to alter the behavior of a search.

## 1.88 HELP/Printing

This page unintentionally left blank. Please try the Index.

## 1.89 HELP/Exporting

This page unintentionally left blank. Please try the Index.

#### 1.90 HELP/Databases

This page unintentionally left blank. Please try the Index.

### 1.91 CAUGHT FISH

This page unintentionally left blank. Please try the Index.

#### 1.92 CAUGHT FISH/Close window

This will merely close the Search Set window. It will not lose the current Search Set. To open the Search Set window again, click on the icon which contains the "boney fish" symbols.

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## 1.93 CAUGHT FISH/Apply Mask

This command applies a new mask to all fish in the Search Result window. More flexibility will be offered to this function in the future.

## 1.94 SEARCH EXPRESSION ERROR: Logical Operator Expected

```
You failed to provide a legal operator, meaning that KingFisher could not figure out in which way you want to combine two or more expressions.

Valid logical operators are:

& Logical AND (as in "if this AND that is true, then ...")

| Logical OR (as in "if either this OR that is true, then ...")

^ Exclusive OR (as in "if either this OR that is true, but NOT BOTH, then ...")

A unary operator may be used to reverse the value of an expression:
```

# 1.95 SEARCH EXPRESSION ERROR: Comparison Operator Expected

Logical NOT. You may use the ~ character instead; your choice.

You failed to provide a comparison operator, meaning that KingFisher could not figure out in which way you wish to apply a value to a field.

Valid comparison operators are:

Equality (as in "if the field contains exactly this value, then ...") You can also use two equal signs, which is what the C programming language uses for equality tests. The choice is yours.

```
ex: name = 'kingfisher'

>= Alphanumerically greater than or equal.

ex: version >= '2.0'

<= Alphanumerically less than or equal.

ex: date <= '1994.08.31'

> Alphanumerically greater than.

< Alphanumerically less than.
```

<> Not equal. This is the exact opposite of the  $^{\prime}$  =  $^{\prime}$  operator. You may

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```
use != instead, which is what the C programming language uses to test for inequality.
```

\$ Read this symbol as "contains the substring" so that the expression name \$ fish

reads "If the name field contains the substring 'fish' then ..."

## 1.96 SEARCH EXPRESSION ERROR: Invalid comparison operator

The symbols you used do not make a valid comparison operator.  $\leftarrow$  Please note

that the following are NOT valid:

>< => =< !< !> >\$

Click

here

for a list of valid comparison symbols.

Click

here

for detailed information about creating a search expression.

#### 1.97 SEARCH EXPRESSION ERROR: Mismatched Parentheses

Each open parentheses must be matched by exactly one closing parentheses. You have either used too many (symbols or too many) symbols. You may have forgotten to enclose in quotes the (or) symbols meant to be part of a string constant.

### 1.98 SEARCH EXPRESSION ERROR: Field identifier expected

KingFisher requires you to provide the name of a field in the ← database

before you can give it a comparison or logical operator. If you need help constructing a legal search expression, click

here

# 1.99 SEARCH EXPRESSION ERROR: Unsupported Feature

You have hit upon an as-yet unsupported feature of the expression parser. This feature may become operational in the future to allow you to build more complex expressions with fewer symbols.

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### 1.100 SEARCH EXPRESSION ERROR: Internal Error

An internal error has occurred in the expression parser. Please  $\leftarrow$  write down the exact expression (with spaces and all characters trailing) to write to the author of KingFisher with this bug report!

## 1.101 SEARCH EXPRESSION ERROR: Incomplete Expression

The expression

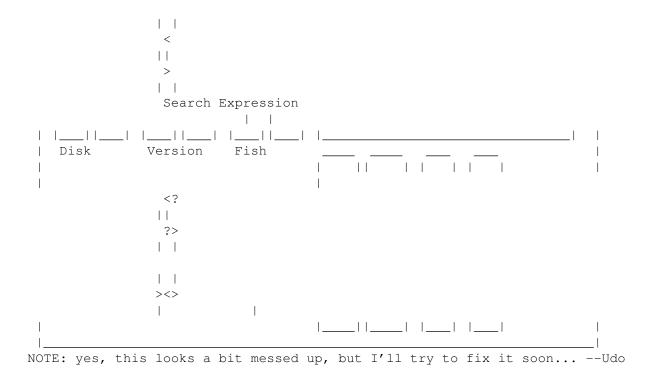
is incomplete. You must provide additional components before  ${\tt KingFisher}$  can process the request.

### 1.102 4 GADGETS

The following is an approximate layout of KingFisher's  $\leftarrow$  display. The buttons below are placed to correspond with gadgets in the display. Choose any of them for explanations of their functions, or press the HELP key while the mouse pointer is over the gadget in the real window.

| Fish/Disk                      |                        |
|--------------------------------|------------------------|
| Number                         |                        |
| Flag Gadgets                   | 1                      |
|                                |                        |
| Description of record contents |                        |
|                                | _   <br>  _   <br>   _ |
|                                |                        |
| <<br>     <br>  >              |                        |
|                                |                        |
|                                |                        |

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## 1.103 GADGET: Home/End of Database (Buttons)

These gadgets immediately jump to the first or last record in the database. They are ghosted if you are already located on the first and/or last record.

## 1.104 GADGET: Browse across Disks (Buttons)

These gadgets jump over one or more fish (records) if the database index defines them to be located on multiple disks.

The original Fish Disks database that ships with KingFisher Release 2 defines 1000 such disks, but a CD-ROM usually consists of no more than a single disc, wherefore the distinction of separate disks is less clear, if even meaningless. In these cases you will find that all functionality referring to multiple disks becomes unavailable.

## 1.105 GADGET: Browse across Versions (Buttons)

These gadgets jump to previous or later releases of the same program, provided that information is recorded in the database index. If no such data is recorded, KingFisher has at the moment no way to provide you with this functionality.

The original Fish Disks database that ships with KingFisher Release 2 defines over 1000 linked versions, but with CD-ROM databases, KingFisher can no longer rely on quite the same format and usually has no such links

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available.

A future release of KingFisher will introduce more powerful VersionLink handling than earlier releases had. For the moment, you will find the links ready-set only in the original Fish Disks database.

One or both of these gadgets will be ghosted if a link in that direction is not available.

### 1.106 GADGET: Browse from Fish to Fish (Buttons)

These gadgets permit you to browse through the database one fish (record) at a time. These gadgets will be ghosted if you are at one end of the database and cannot move in that direction any further.

## 1.107 GADGET: Flag Gadgets (Toggle Buttons)

Each fish (record) in a KingFisher database has 16 special  $\leftarrow$  purpose flags

associated with it. These are represented by two rows of 8 flags each. Their layout and appearance resemble the following diagram:

The top row represents pre-defined flags; do not assign a different meaning to these flags than is given below:

D Deleted. This record is marked to be deleted from the database. A command available in a future version of KingFisher will use this flag to physically remove fish (records) from the database, thereby allowing you to eliminate unwanted records and recovering disk storage.

- \_ (undefined at this time; reserved for future use)
- O Owned. You already own this item.
- H Hidden. You do not wish to have this item appear in your searches (provided you set this flag in the Avoid mask and turn on the use of Search Masks with the Use Search Masks

menu item.

- M Marked. You could use this as a "bookmark" to quickly find records you wish to come back to later.
- 8 1 These are your own flags to define and use in any way that you may wish. KingFisher will never assign special meaning to these flags. You could use these flags as "bookmarks" in addition to the "M" flag, for example.

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NOTE: These flags will be ghosted (i.e. unavailable for changes) if the index of the current database is located on R/O media, such as a CD-ROM or the media or file is for some other reason not writable.

NOTE: The implementation of these gadgets will change in the future to be more in line with the general appearance of KingFisher and the Style Guidelines set forth by Commodore. They are fixed, internal images at the moment but will be made user-definable in the future.

Any alteration to these flags causes an immediate change in the database index. When the database is closed, KingFisher writes the index back to disk.

### 1.108 GADGET: Search Expression History (Button ==> ListView)

Despite my obvious lack of artistic skill I hope that this gadget somewhat reminds you of an open book. The idea is that you can choose an expression from a list of previously used expressions that has been recorded for this purpose.

Clicking on this gadget will open up a listview from which you can select a new expression by clicking on it. The window will go away immediately. Pressing the Escape key or closing the window will cancel the action.

## 1.109 GADGET: Search Result Window (Button ==> ListView)

If ghosted, a Search Set has not been loaded or generated.

This gadget opens and closes the Search Result window from which you can select individual matches, jumping immediately to the requisite database record to view the item's information. Closing this window will not lose the search set.

### 1.110 GADGET: Search Gadgets (Buttons)

```
These gadgets initiate a search either in reverse or forward ← direction. If

you are creating a

Search Set
the current fish is included in the search,

otherwise it is skipped. The Search Expression string gadget must contain a valid

Search Expression
; if it does not, you will receive a diagnostic error message.
```

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## 1.111 GADGET: Disk/Fish(record) Selector (Cycle)

Depending on the state of this gadget, the numeric gadget to its right will accept and show either the Disk number or the Record (fish) number of the currently presented record.

## 1.112 GADGET: Disk/Fish(record) (Integer)

Depending on the state of the cycle gadget to the left of this integer gadget, you are expected either to enter a fish (record) number in this gadget, or a disk number.

Notice that a CD-ROM consists only of one disk, which means that the disk gadget will always show a disk number of 1 and you cannot select a disk other than that.

The "Fish Disk" collection, however, consists of 1000 disks and over 4500 fish (records) so you can quickly jump to these positions in the database.

### 1.113 GADGET: Search Expression (String)

The search expression in this gadget is the expression that is  $\ensuremath{\hookleftarrow}$  used when

you start a search. You may select another expression from the list of previously used expressions by clicking on the gadget beneath the search expression string gadget, that looks like an open book.

Need help with constructing search expressions? Click here

## 1.114 GADGET: Fish Description (ListView)

This gadget is sized to fit in the available space in the  $\leftrightarrow$  window and the

textual description for each fish (record) is word-wrapped within it. You can scroll this gadget with the up and down arrow gadgets.

The layout of the displayed text is defined by the Display Format option.

#### 1.115 5 REXXFISHER

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RexxFisher is a Client application that attaches to and provides  $\leftrightarrow$  an ARexx

interface to the KFServer. By invoking RexxFisher with the name of a port on the command line you can assure that any application can make use of the KFServer databases.

All commands sent to RexxFisher have an RF\_ prefix to prevent confusion with standard ARexx commands. I think QUIT is a normal ARexx command, and so might be a few others here or there. You can use these commands in any mix of upper and lower case letters that you like.

The only commands you can execute WITHOUT a prior RF\_HELLO command are the following; they do not access the database and in fact do not even require that KFServer is running!

RF\_VERSION

Returns RexxFisher's version tag string (without \$VER:)

RF HELP

Returns a list of acceptable commands.

RF\_QUIT

Tells RexxFisher to shutdown.

RF\_DISABLE

Disables a command.

The following command is used when trying to connect to the KFServer; it will start the server software if it is not already running:

RF HELLO

Establishes a connection to the KFServer.

The following commands can be issued only if you have issued a successful RF\_HELLO command:

RF\_BYE

Terminates a connection to the KFServer.

RF LIST

Obtains a list of available databases.

RF\_USE

Selects a particular database for use.

RF\_FIND

Searches the database.

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RF GETFISH

Retrieves (and optionally formats) a database record.

RF\_OBTAIN

Obtains specific record information.

RF\_STATUS

Requests client status from server.

A demonstration script, RexxDemo.kfrx, is supplied for your enjoyment. This script assumes that you have started KFServer and RexxFisher and that they are running in the background. Enter "rx rexxdemo.kfrx" to run the demo script.

Bugs: If RexxFisher tries to startup the KFServer and this fails (because the KFServer cannot be made to startup for one reason or another) then RexxFisher may crash the system with an Illegal Instruction. This problem will be taken care of in a future release!

## 1.116 ARexx: RF\_VERSION

Usage: RF\_VERSION

Returns RexxFisher's version tag, without the \$VER: portion, of course. This will ALWAYS use the standard Style Guide compliant format such as:

RexxFisher 1.5 (8.5.94)

Example:

RF\_VERSION

say "Welcome to" result

## 1.117 ARexx: RF\_HELP

Usage: RF\_HELP

Returns a list of all acceptable commands as well as some sort of command template to help you figure out what sort of parameters you might be able to get away with.

Example:

say "These commands are available to you:"
RF\_HELP
say result

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## 1.118 ARexx: RF\_QUIT

Usage: RF\_QUIT

Tells RexxFisher to shutdown. In a real environment, you might want to issue a command such as "RF\_DISABLE RF\_QUIT" to prevent the QUIT command from being recognized. This will also suppress the command from being listed by RF\_HELP.

Despite a disabled RF\_QUIT, RexxFisher will respond to a CTRL\_C signal such as those sent by the c:BREAK command.

Example:

RF QUIT

## 1.119 ARexx: RF\_DISABLE

Usage: RF\_DISABLE command

Disables a command so that RexxFisher will no longer be able to execute it. This prevents accidental shutdown of RexxFisher, for example by a "rogue script"

Example:

RF\_DISABLE RF\_QUIT

### 1.120 ARexx: RF HELLO

Usage: RF\_HELLO "arbitrary identification"

Needs no previous login and will establish a connection to the KFServer. If the KFServer is not running, RexxFisher will attempt to start it in the exact same way that KingFisher (the GadTools client) tries to start KFServer. The only problem is that RexxFisher cannot (yet) be told to look in a place OTHER than the default directory for the KFServer. Start RexxFisher in the same directory where KFServer is located and all will be fine.

You should give a nice and descriptive name along with the RF\_HELLO, such as:

If you issue RF\_HELLO when already connected, then RexxFisher will issue an implicit RF\_BYE command to the server to disconnect you. RexxFisher will also do this when it is made to shutdown (either with RF\_QUIT or through a c:BREAK signal.)

#### Example:

RF\_HELLO "test script"

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## 1.121 ARexx: RF\_BYE

Usage: RF\_BYE

Sign off from the KFServer. This terminates your access to the server. If you forget this, then RexxFisher keeps the connection active for the next script, which may be confusing. RexxFisher has no idea, of course, if your script has terminated or is just idling around for no particular reason.

Example: RF\_BYE

## 1.122 ARexx: RF\_LIST

Usage: RF\_LIST

This obtains a list of all available databases from the server. The format of this list is as follows:

"Description\1database.kfdb\n Description\1database.kfdb\n"

Which means that there are one or more lines of text each of which begins with a nice descriptive text for the database followed by a  $\1$  character (which is an ASCII 1, ^A symbol) and followed then by the .kfdb name which you would need to give to the server through the RF\_USE function to make a selection.

Example:
 RF\_LIST

## 1.123 ARexx: RF\_USE

Usage: RF\_USE database

This selects a database by giving it the name of a .kfdb file. Please see RF\_LIST above for more information.

Example:

RF USE "Miniature.kfdb"

# 1.124 ARexx: RF\_FIND

Usage: RF\_FIND "expression"

RF\_FIND

This command initiates, continues, or configures a search operation:

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```
RF_FIND "expression"
 Allows the use of
                       the same
              expression syntax
                as
 KingFisher. The expression is compiled and the function
 begins a search at once. If you receive an error, the
 result string is in the format "Error X in column Y" where
 the error values are these:
 1 Comparison Expected ($ = ! = < > > = < =)
    Operator Expected (AND, OR, XOR)
  3 Invalid Comparison (ex: <! >< ... are bogus)</pre>
  4 Mismatched Parentheses
 5 Field Expected (must use "field op value")
  6 Unsupported Feature (no hints yet :)
 7 Internal Error
 8 Incomplete Expression
 Example:
   RF_FIND "name$kingfisher|name$aquarium"
RF FIND AGAIN
 Search onward with the previously used expression. You
 must have an expression compiled, otherwise this will not
 work.
 Example:
   RF_FIND AGAIN
RF_FIND OPTION x
 Alter the behavior of the FIND command according to the
 option x:
 FORWARD
           Search forward
 BACKWARD Search backward
 CASEIGNORE Upper/lower case ignored
 CASEEXACT Upper/lower case important
 TRIMBLANKS Trim trailing blanks off search-strings
 NOTRIMBLANKS Do not trim blanks
 SIMPLEEXPRESSION Uses original KF1.40 expressions
 COMPLEXEXPRESSION Uses new KF2.0 expressions
 SHOW
        List current options
 Example:
   RF_FIND OPTION FORWARD
   RF_FIND OPTION CASEIGNORE
   RF_FIND OPTION TRIMBLANKS
   RF_FIND OPTION COMPLEXEXPRESSION
   RF_FIND OPTION SHOW
   say result
 NOTE: There is no way to interrupt a search in progress.
```

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### 1.125 ARexx: RF GETFISH

Usage: RF\_GETFISH fishnum RF\_GETFISH fishnum width RF\_GETFISH fishnum width displayformat

Retrieve a specific fish by record number. The command has a second, optional parameter that determines if the resulting string is formatted or retrieved in raw form. A positive number for the 2nd parameter indicates the column width of the display that the text should fit. The resulting text, when formatted, will have an appearance much like that in KingFisher's ListView.

A 3rd parameter specifies a display format other than the

default.

Notice that a record number of 0 retrieves the most recently retrieved record. It is best not to rely on this functionality, especially after a search operation but may be useful in some cases:

#### Example:

RF\_GETFISH 3693
RF\_GETFISH 3693 75
RF\_GETFISH 0 75 "NAME=@{name}\nAUTHOR=@{author}\nDESCRIPTION=@{description}"

## 1.126 ARexx: RF\_OBTAIN

Usage: RF\_OBTAIN what

Obtains a variety of information from the server, according to the parameter given:

DISK The current disk number.

FISH The current fish number, usable as the 1st parameter to the  $\ensuremath{\mathsf{RF\_GETFISH}}$  command.

FLAGS The flag bits of the current fish; the values currently defined, although not necessarily setup for each fish, are:

0x0100 Marked for retrieval 0x0200 Marked for ownership

0x0400 Marked to stay hidden in searches

0x8000 Marked to be deleted

Bits in the range 0x0001 through 0x0080 are user defined.

PVER The fish number of the PREVIOUS VERSION; the value 0 is returned if no previous version exists.

NVER The fish number of the NEXT VERSION; the value 0 is

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returned if no next version exists.

DBNAME The descriptive name of the database in use.

DBFILE The filename (ending with .kfdb) of the database in use. Such a filename can be passed to the RF\_USE command.

DBSIZE The number of records in the current database, which is also the highest fish number you can pass to the RF\_GETFISH command.

#### Example:

RF\_OBTAIN DISK

RF\_OBTAIN FISH

RF\_OBTAIN FLAGS

RF\_OBTAIN PVER

RF OBTAIN NVER

RF\_OBTAIN DBNAME

RF\_OBTAIN DBFILE

RF OBTAIN DBSIZE

## 1.127 ARexx: RF\_STATUS

Usage: RF\_STATUS

Retrieves status information from the server. This is effectively the same as what KingFisher displays in the Status command (rightAmiga-I) except that it applies to RexxFisher.

#### Example:

RF STATUS

say result

#### 1.128 6 TROUBLE SHOOTING

This section is woefully incomplete, and I apologize. If you experience a problem of any kind with KingFisher, please write me (by postal or email) and I'll try to help. Your suggestions will make their way into this section as I learn more about what to expect and what doesn't work. Of course, bugs and conceptual problems will be fixed and smoothed out to make KingFisher easier to install and operate.

If you find that KingFisher is deficient in some way that prevents you from getting something done, or you find yourself frustrated and wish an easier way existed, or you come across a serious problem with KingFisher, please attempt to resolve the problem with me first before crying out in public. A reputation for quality is difficult to build and easy to lose. I have made every effort to assure that KingFisher 2.3 is as stable and bugfree as can be expected of a product as complex (and new!) as this. If, however, you experience a problem, allow me the chance to help!

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#### 1.129 7 THE FUTURE

Numerous enhancements are already planned for KingFisher Release 2, changes to the interface, additions to functionality, and improvements in speed. The following is a brief list of only some of the features you can expect to see in a future release, and if you wish to cast your vote for others, feel free to drop me a line:

- · Automatic use of a Quick Index will allow searches to become nearly instantaneous when only the field of the Quick Index is referenced in expressions,
- · VersionLinks will be editable on an individual scale or by performing algorithmic scans on the database,
- $\cdot$  A database may be reorganized, duplicated, or packed (deleted records removed),
  - · Support for various alerts (i.e. "search done") and iconification,
  - · The keyboard, including menu shortcuts, will become customizable.

And lots more...

#### 1.130 8 THANKS

I would like to extend my thanks to the following people whose feedback, help, input, criticism, requests, and support have helped grind the rough edges off KingFisher and have helped make the program a more polished product that it otherwise would have been:

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The computer that's fun! Ti amo, Amiga!

#### Dan Barrett

My favorite Amiga humorist (and discriminating beta-tester, too!) BLAZE on, Dan!

#### Fred Fish

For his many years of service to the Amiga community, and especially for the collection of software that has come to be known as the "Fish Disks," and his recent step up to a CD-ROM distribution which has been one of the reasons I have created KingFisher 2.3. Fred's efforts have set him apart as one of the Amiga Community's most important people.

With his kind permission, a representation of Fred's Fish Logo is used in one of the gadgets. Thanks, Fred!

#### Dave Haynie

For his work on my favorite computer and for DiskSalv 2.0 which has pulled my a\*\* out of a sling when that disconnected organ in my skull failed to shut down the system before lightning knocked out the building's power supply and my file system was badly corrupted.

## Bill Sorenson

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Michael Sinz, formerly Commodore-Amiga

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And last, but not least, my thanks to you who have already registered KingFisher and shown your very real support for my efforts. You know who you are. Cheers!

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