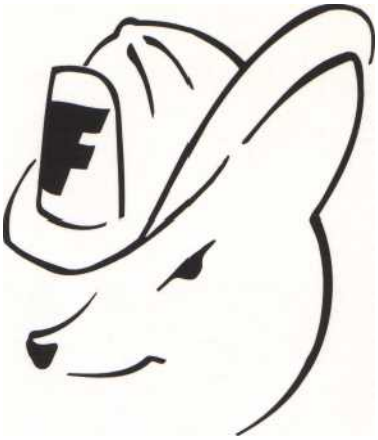

# Reference Manual

Version 2.5

***(ompotible with*** All Versions of FoxPro® Versions 2.SX and 2.6X

**M**ICROMEGA SYSTEMS, INC.
832 BAKER STREET
SAN FRANCISCO, CALIFORNIA 94115

FoxPro

*Warp Speed Reporting Wizard for FoxPro®*

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Carl E. Henderson, whose work many years ago spawned the great grandmother of *Foxftre!*.

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And the following people and organizations for their noteworthy software contributions:

Windows Print Dialog FFWINPRN.FLL (c) Micromega Systems, 1993
Cornerstone Software Ltd. Auckland NZ CIS 100026,2444

GENSCRNX screen code generator (public domain)
Ken Levy C1S 76350,2610

GENMENUX menu code generator (public domain)
`Andrew Ross MacNeil` CIS 76100,2725

JKEY Browse power search (shareware -- $30 contribution for use in other applications)
Joe Gotthelf CIS 74017,3670
August Technologies, Inc.
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We appreciate all your efforts toward making *Foxfwe!* the best it can be.

# Chapter 5 Tutorial: Mastering Foxfire!

Before you start creating reports from your own database, take the time to work through the complete tutorial. It will make using *Foxfere!* easier.

First, the tutorial introduces the concepts, organization, and vocabulary of *Foxftre!*. It then explains the cause-effect relationship between the parts of a query or report Request and how each part affects the report itself. After you understand these fundamentals, the tutorial shows you step-by-step how to:

- Start *Foxfere!* and access the sample database and Requests
- Create and modify detail, summary, and cross-tab Requests
- Create Requests for mailing labels
- Run and preview reports
- Use filters to narrow your results
- Sort your results
- Organize your results and insert calculated fields into the group footings when the group changes

  Add new data items to *Foxfere!'s* data dictionary, including a complex text item

The exercises and examples in the tutorial use the sample data set in Chapter 4 "Understanding the Sample Database." You may want to refer back to it at times.

## Basic Concepts of Foxfire!

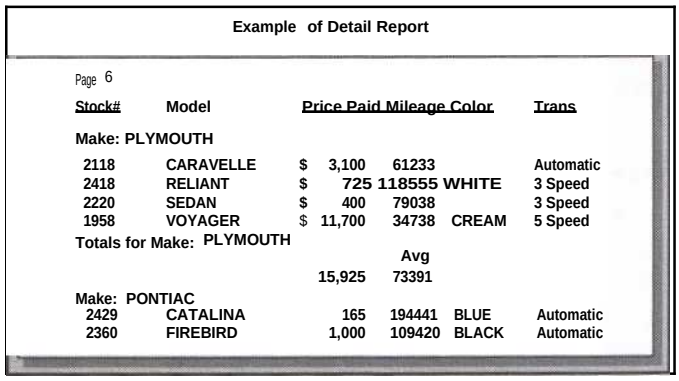
*Foxfere! is* a query and report generator, a program for extracting and formatting data from your database into meaningful information. It enables you to perform three basic types of processing or analysis: detail processing,

summarization, and cross tabulation (sometimes called Cross *Tabs). Foxfire!'s* results can be displayed or directed to many types of outputs: reports, on-screen browse lists, mailing labels, graphs (when connected to an optional graphing program), spreadsheets, mail-merge data files in several formats, ASCII files, and Xbase files.

Here are examples of each type of Request, all displayed as reports so you can see the results:

- Detail - a report where a row is displayed for every qualifying record.

Detail Report: **one row per individual car.**



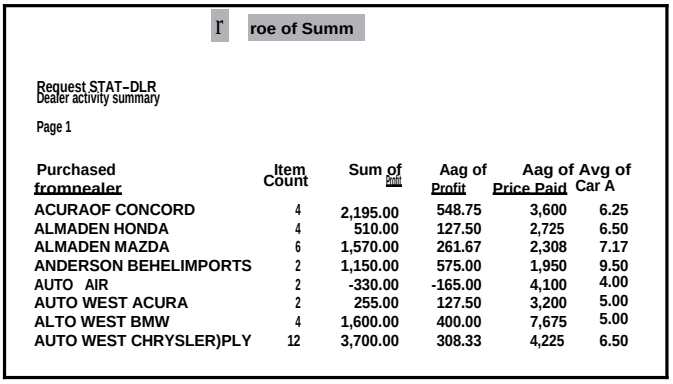
**Example of Detail Report**

Page 6

| Stock# | Model | Price Paid | Mileage | Color | Trans |
|---|---|---|---|---|---|
| Make: PLYMOUTH | | | | | |
| 2118 | CARAVELLE | $ 3,100 | 61233 | | Automatic |
| 2418 | RELIANT | $ 725 | 118555 | WHITE | 3 Speed |
| 2220 | SEDAN | $ 400 | 79038 | | 3 Speed |
| 1958 | VOYAGER | $ 11,700 | 34738 | CREAM | 5 Speed |
| Totals for Make: PLYMOUTH | | Avg 15,925 | Avg 73391 | | |
| Make: PONTIAC | | | | | |
| 2429 | CATALINA | 165 | 194441 | BLUE | Automatic |
| 2360 | FIREBIRD | 1,000 | 109420 | BLACK | Automatic |

Summary - a report that groups records and then summarizes and calculates information about that group. You specify how to group the records.

Summary Report: **one row per grouping of cars (the group is "all cars sold to the same dealer")**



r roe of Summ

Request STAT–DLR
Dealer activity summary

Page 1

| Purchased fromnealer | Item Count | Sum of Profit | Aag of Profit | Aag of Price Paid | Avg of Car A |
|---|---|---|---|---|---|
| ACURAOF CONCORD | 4 | 2,195.00 | 548.75 | 3,600 | 6.25 |
| ALMADEN HONDA | 4 | 510.00 | 127.50 | 2,725 | 6.50 |
| ALMADEN MAZDA | 6 | 1,570.00 | 261.67 | 2,308 | 7.17 |
| ANDERSON BEHELIMPORTS | 2 | 1,150.00 | 575.00 | 1,950 | 9.50 |
| AUTO AIR | 2 | -330.00 | -165.00 | 4,100 | 4.00 |
| AUTO WEST ACURA | 2 | 255.00 | 127.50 | 3,200 | 5.00 |
| ALTO WEST BMW | 4 | 1,600.00 | 400.00 | 7,675 | 5.00 |
| AUTO WEST CHRYSLER)PLY | 12 | 3,700.00 | 308.33 | 4,225 | 6.50 |

Cross-tab - a report that analyzes the relationship between two variables and displays the results in a matrix containing a value for every pair of variables.

Example of

Cross-Tab Sum of Gross Profit
for Salesman Name by Cars Month Sold

Page 1 of Strip 1

| Salesman Name | Sun | Cars Month Sold May '89 | Jun '89 | Jul . 89 |
|---|---|---|---|---|
| JOSEPH COLLINS | 37775 | 16351 | 28254 | 1170 |
| MARK DODGE | 49411 | 18797 | 24329 | 6285 |
| MARK HARRISON | 5240 | 685 | 3095 | 1460 |
| JOHN D HINSON | 18965 | 11540 | 8660 | -1235 |
| MARVIN KASPER | 11431 | 5076 | 6415 | -60 |
| JOSEPH KOENIG | 112888 | 50611 | 50467 | 11810 |
| RONALD J RADER | 39167 | 17502 | 18965 | 2700 |
| Sum | 274877 | 120562 | 132185 | 22130 |

month (variable #2)

R

Each *Foxftre!* report is specified in a *Request.* The Request contains information that controls the *query* (what data to include in the results) and the *output* (the form and format of the results).

Among the specific information a Request contains are:

The list of data *items* to appear in your report.

For example, if you were in the auto wholesale business you might want a report listing the cars in inventory. Among the data items would be Car Make, Car Model and Year of Manufacture.

*Filter* conditions.

Filters enable you to select and report subsets of information. In other words, filters *narrow* the potential results. For example you may want to see all *red cars* sold to a specific *car dealer.*

*Sort order.*

You specify the order of records in your report. For example, you commonly find primary and secondary sorting in telephone directories. Your phone book is primarily sorted on Last Name and secondarily on First Name within Last

Name. That means that when there are several listings for the last name, Smith, the phone directory sorts all first names alphabetically. (Alice Smith appears before Zachary Smith.)

*Output* options.

These options allow you to select the *type* and *destination* of your output. For instance, you can select a report, labels, browse list, and so on, and send the output to the printer, the screen, or to a file on disk.

## Foxfire!'s Organization

*Foxfere!'s* organization reflects the various parts of a Request and the sequence of steps you normally follow in working with them. Refer to the following diagram as you study this brief overview.

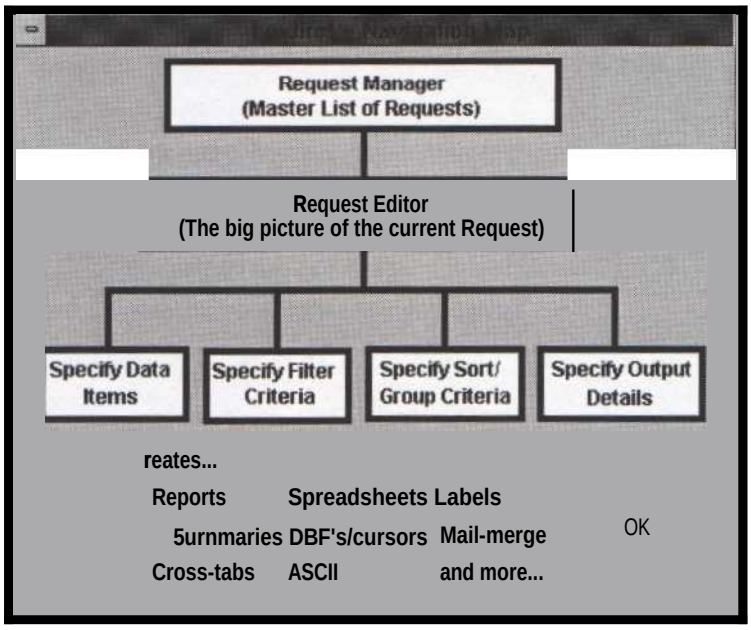
The first (top level) screen you see is the Request Manager, which presents a list of Requests currently on file, and allows you take action on them.

The Request Editor screen, located just below the Request Manager, enables you to create a new request, or edit previous requests (think of it as a "workbench" for a particular Request).

Four separate screens he below the Request Editor. Each of these enables you to specify a particular aspect of the request:

- Data Item Selector - where you specify the data items included.
- Filter Editor - where you create filters.
- Sort/Group Editor - where you specify sorting and grouping criteria.
- Output - where you specify the form and format of the results.






As you work through the exercises, keep this diagram in mind to reinforce the work you are doing. If at any time, you want to reference this diagram on-screen, it's available in the **About Foxfire!** panel from the Foxfire! menu (it's called Map of Foxfire! ).

That's enough theory. Now let's put it to work!

# Starting Foxfire!

## Preliminaries

This tutorial assumes that *Foxfire! is* already installed on your system. If you haven't installed *Foxfire!*, go to Chapter 2 "Installing Foxfire! On Your Computer" and do so before proceeding.

Before starting *Foxfire!*, be sure that your DOS path includes the directory where FoxPro is located. If necessary, add the FoxPro directory to the DOS path.

**Example:** If Foxpro is located in C:\FOXPRO then the DOS **"path" statement in your** computer's AUTOEXEC.BAT file should look something like this:

*SET PATH=C: \ ; C: \DOS; C: \FOXPRO*

If necessary, add the Foxpro directory to your DOS path.

## Steps to Follow

1. At the DOS prompt, use the CD command to change to the directory where you installed *Foxfire!*.

   If *Foxfire!* is in C:\FOXFIRE, type:

   *C:*

   *CD \Foxfire*

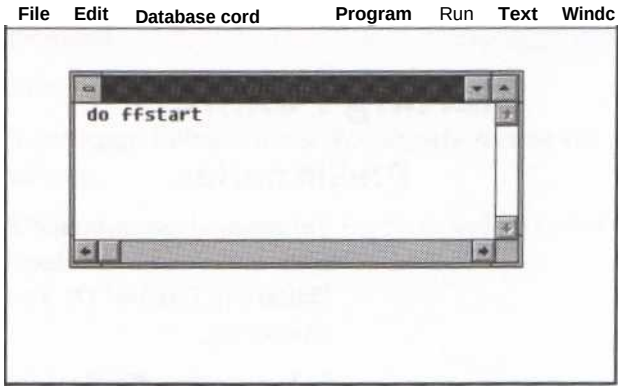
2. Start Foxpro.

   The Command Window appears after a moment.

   Note: The steps to start Foxpro depend on the version of Foxpro you are using. Consult your Foxpro user manual for details.

3. In the Foxpro Command Window, type:

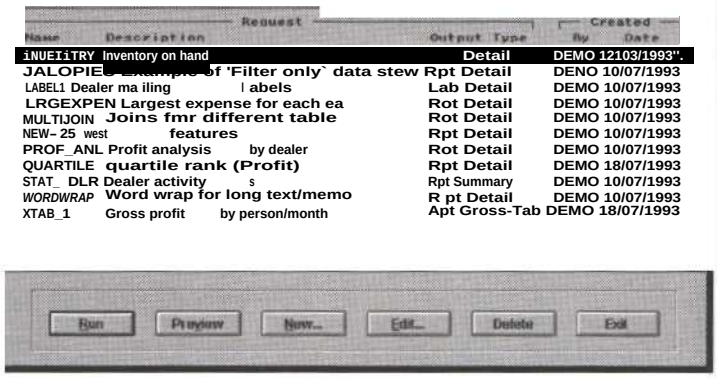
   *do ffstart*




   The *Foxfire!* banner screen appears.

4. Press any key or move the mouse to clear the banner screen.

The Request Manager appears.




Note: If the Request list is empty or it contains different requests than the example above, don't be concerned. You'll correct this in the next step.

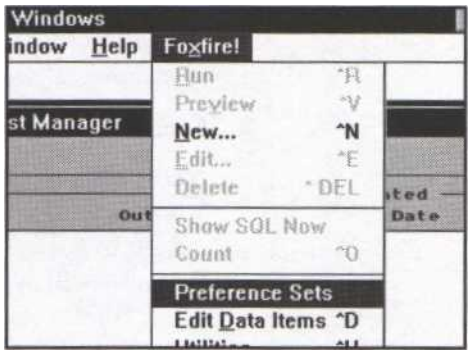
## Selecting the Sample Preference Set

A Preference Set controls many operational aspects of Foxfire! while it is running. The important aspect here is which database Foxfire! will use when it extracts data for queries and reports.

Since this Tutorial is based on the sample data base described in Chapter 4 "Understanding the Sample Database", the Preference Set called Sample Data Base must be selected in order to access it.

To select the sample data set:

1. Choose Preference Sets from the Foxfire! menu.



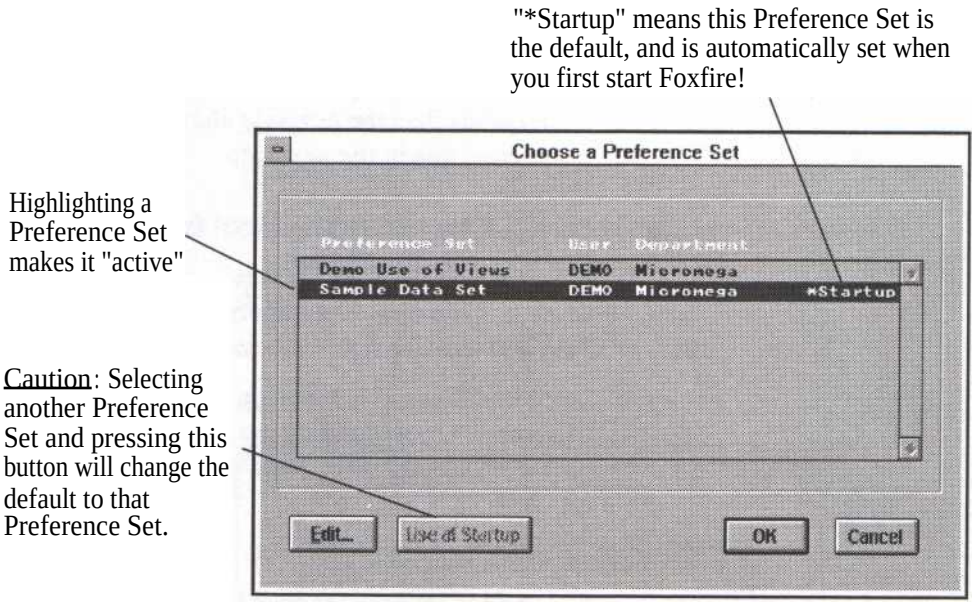
The Choose a Preference Set dialog appears.

Important Note: Before taking any other actions, examine the list of Preference Sets and note the following (you may want to write it down):

which one is currently highlighted?

which one contains the phrase "*Startup" to the right side?

This information is important if *Foxfire!* has already been customized. If so, you must restore these settings before you can use *Foxfire!* to work with your own data.




If Sample Data Set is already highlighted in the list, then you already have the sample data set selected. Press Cancel and go to the next section of the tutorial.

2. Select Sample Data Set and press OK.

   Note: If you had to select the Sample Data Set, then you are working with a copy of *Foxfire!* that has already been customized. Every time you start *Foxfire!*, your customized Requests will appear.

## Relationship Between Requests and Results

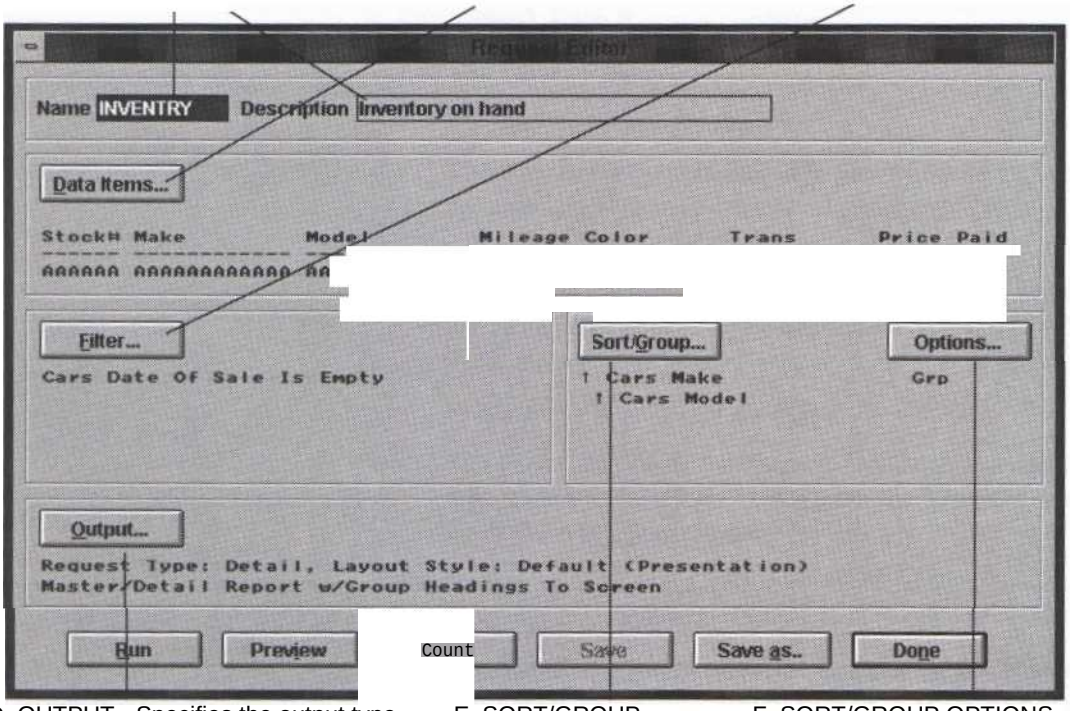
The following two figures summarize the relationship between the Request and the report it produces. Study them so you understand the cause and effect relationship between a Request and its report.

Note: The callouts, A- F, correspond between the "Sample Request "and "The Resulting Report (in DOS)". .

A. NAME and DESCRIPTION - Specifies the report name and title.

B. DATA ITEMS - Specifies the contents of the detail line and column headers.

C. FILTER - Specifies selection criteria: "Which records will be included in the results?"




D. OUTPUT - Specifies the output type (report, label, or datafile) and destination (printer, screen, or file). For reports, this also determines format.

E. SORT/GROUP - Determines primary, secondary and additional sort orders.

F. SORT/GROUP OPTIONS- Specifies various options for each grouping.

FIGURE 1 Sample Request

A. Report name, title and page number (just below report title).

B. Column headings and data items.

C. Filter Criteria: Cars Date of Sale is Empty and Cars Make is in List "BMW","BUICK". ("NOTE The second filter criterion has been added in order to limit the size of the report to just one page.)

```
Request: INVENTRY
Inventory    on hand
Page 1
Make: BMW
Stock# Modal          Mileage Color       Trans       Prices paid sin
  2ZS1 3Zol             91623             4 Speed $         2,000 MD
Totals for Make: BMW
                        91623                               2,000
s
      Make: BUTCH
.     Stock# Model      Mileage Color       Trans       price paid SIR
      ZZ89 CENTURY        39957             3 speed           3,680 AR
      Z41Z CENTURY        49-IZZ BLUE       3 speed           3,975 MD
      2328 LERABRE       110358             3 speed    $ 500         MD
r-    2355 RE43AL        109307 BLUE        3 Speed $         1,359 JC
      2440 REGAL         101192 RED         Automatic t"J     l.' Zoo Nit
      ZZZZ REGAL           82670            5 speed $           400 MD
      2299 SHYHAWx       163137 GOLD        Automatic $         200 JC
      2361 SIC YLARK      49963 BROWN       'l Speed          1,700 RR
      1872 SRYLARM        50746  BROWN      5 speed 1,800           ax
      2341 SXYLARIC       94566 RED         4 Speed           1,500 MX
      2323 SMYLARN         5557             Automatic $       1,275 MD
                                                             17,589
                                                             19,589
nes          n                    ,,  opy  o    s       o    y! ayoul
```

D. Output type = "Report"

E. Primary sort /group is by "Cars Make", secondary sort/group is by "Cars Model".

F. Sort/Group Options - calculate subtotals and grand total.

FIGURE 2 The Resulting Report (in DOS)

# Appendix D Foxfire! System Files

*Foxfire!* **is a data-driven application, which means that as it runs, it looks in various databases to gather information about how to run. The databases named below are used to specify and control what** *Foxfire!* does. **Some of them reside in the** *Foxfire!* **home directory while others reside by default in the \DBFS directory. File names and locations may be different in your system if a developer has changed the configuration files-those shown below are for** *Foxfire!* **as it is initially installed. Consult the relevant Preference Set to determine the actual file names in use.**

Note: **These .DBF files may have associated .CDX and/or FPT files.**

**Database names with a trailing asterisk (*) are fully documented in the** *Foxfire!* **data dictionary (FFFLDLST.DBF/.FPT, located in the \GOODIES subdirectory). To see the data dictionary, you may USE and BROWSE it from the FoxPro command window.**

| DIRECTORY | FILE NAME | DESCRIPTION |
|---|---|---|
| home | FPREFER* . | Preference Set file. Pointers to dictionary files, privilege settings, other global options |
| \DBFS | FFRDITMF* | Data Item file. List of queryable fields and where to find them |
| \DBFS | FFREQMAS* | Request file. Contains all specifications for every query/ report defined in *FoxfTre!* |
| \DBFS | FFRDJOIF*. | File Relationship (Join) file. Describes how to link pairs of files when executing queries |
| \DBFS | **FFSYSOBJ*** | System object repository. Contains bitmaps, file structures, etc., which are used internally by *FoxfTre!* |
| home | FFPDSETF . | Printer driver setup repository. See Chapter 6, Using Foxfire!. |