

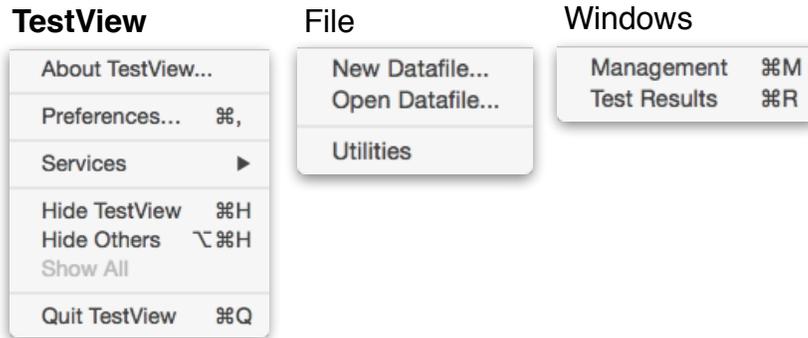
# TestView

TestView stores test results for patients and displays the results in graph form.

The program keeps:

- Patients** name, birthdate, sex, id, notes
- Test Results** patient, test, range lower, range upper, test result, date, time, display order, draw group, notes
- Test Types** test name, display name for printouts, code, range lower, range upper, default display order, default notes to include with each test result, notes
- Test Batteries** battery name, included tests, test display order

## Menus



### TestView

About TestView: Data file path, number of records, contact for bug reporting or suggestions.

Preferences: Automatically check for updates, add or remove a password.

### File

New Datafile: Create a new database for storing a separate set of patients and tests.

Open Datafile: Open an existing Datafile.

Utilities: Verify, repair and backup. Backups can be set by clicking "Database Properties" in the Backup section.

For details on backing up see the manual page:

<http://doc.4d.com/4Dv15/4D/15/BackupScheduler-page.300-2045498.en.html>.

Details about other properties can be explored here too.

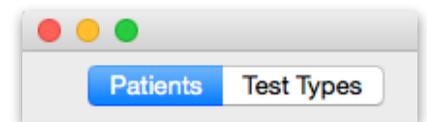
### Windows

Management: The Management window has two pages.

*Patients* manages the patients and the selected patient's test results. Patients can be added, modified, searched and deleted. Test results for a selected patient can be added, modified, searched, deleted and printed. Test results can be added individually or by test battery.

*Test Types* manages the test types available to patients. Test types can be added, modified and deleted.

Test Results: All test results for all patients are displayed in a list which can be queried, sorted and reported.



## Controls

Highlight (or Select) a record by clicking a line.

To select a range of records, click one record, hold the **shift** key and click another record.

Select and deselect single records by holding the **command** (Mac) or **control** (Windows) key when clicking the record.

### Searching and Selecting:

Show All: display all patients or all test results for the selected patient.

Hide Selected: hide the selected records from the display.

Hide Others: hide all but the selected records from the display.

Type words to search for in the entry areas above the lists.

Entering **“ry”** will find **Terry Bleaze and Mary Jone**.

Entering **“on”** and **“ry”** will find only **Mary Jone**.

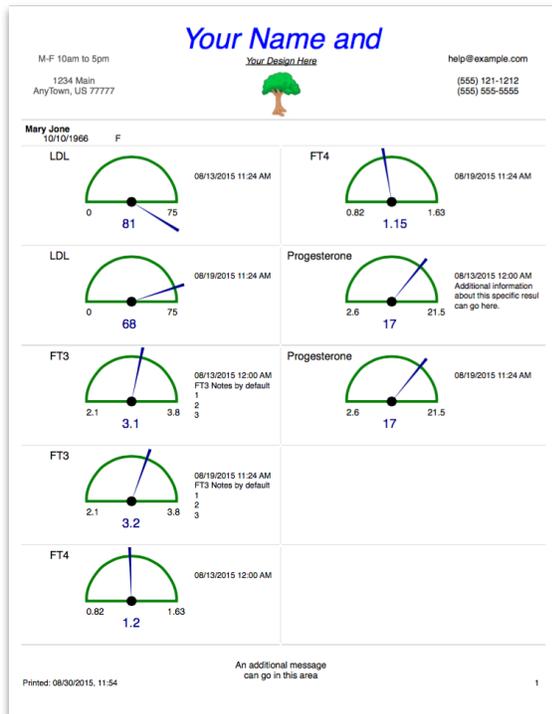
Add a record: creates a new entry in the database.

Edit a record: double-click the record, or highlight the record and click the “Edit...” button in the record’s section.

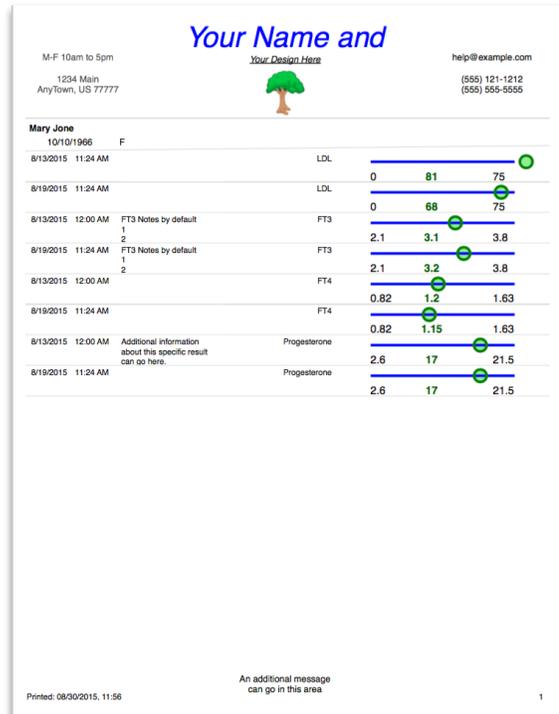
Delete a record: highlight the record and click the “Delete” button in the record’s section. Deleting a patient will also delete the patient’s test result records.

Print: shows a pop-up menu with a choice of how to print the current selection. Note that when all samples are collected at the same time, the collection date and time appear at the top of the report. When one or more result has a collection time that is different from any other’s, the collection time is printed next to each result. Dial printout results are printed top to bottom in the left column first, then top to bottom in the right column.

Dial



Slider



Entering time values: time can be more easily entered using “.” “a” and “p”.

1.30      1:30 am  
 1.30p    1:30 pm  
 15.00    => 3:00 pm  
 15:00    3:00 pm  
 11:15    11:15 am  
 11.15a   11:15 am  
 11:15p   11:15 pm

Time can be entered in  
**24 hour** or **am/pm** format.

## The Test Types Page

The **Test Types** you work with are managed on this page.

*Name* and a *Display Name* can be different from one another. LDL test results might, as shown in this example, be received from more than one source. Here, a general LDL test has been created, and a LDL test for the lab “LabStar” has also been created. Use *Name* to differentiate between the sources, *Display Name* is what appears on the printouts.

*Code* can be any kind of information.

Each test needs an *Upper* and *Lower* limit. The numbers can be positive, negative and decimal.

*Display Order* is the Test the order in which the tests will initially appear. This order can be changed for each Battery.

*Notes to Include...* is text that will be automatically inserted into each test result’s notes as the record is created from this Test Type.

Test name	Display Name	Code	Lower	Upper	Display Order	Notes to Include with Test Results	Notes
Cholesterol - Total	Cholesterol - Total		100	199	1		
Triglycerides	Triglycerides		0	149	2		
HDL	HDL	123-4	39	100	3		
VLDL Cholesterol CAL	VLDL Cholesterol CAL		5	40	4		
LDL	LDL	123-5	0	99	5		
LDL (LabStar)	LDL		0	75	6		
DHEA-S	DHEA		8	188	7		
FT3	FT3		2.1	3.8	8	Default to add to each test result	Regular notes
FT4	FT4		0.82	1.63	9		
RT3	RT3		8	25	10		
Progesterone	Progesterone	PT1	2.6	21.5	11		
Testosterone	Testosterone		10	90	12		

**Manage Test Batteries** to create sets of tests .

Each battery’s display order is set by dragging a test up or down in the “Test” list.

Batteries are used in the patient page when adding the patient’s test results.

Battery Name

- Bat1
- Bat2
- Bat3
- Lipid Panel
- Lipid Panel - LabStar

Test

- Cholesterol - Total
- Triglycerides
- HDL
- VLDL Cholesterol CAL
- LDL

Battery Name

- Bat1
- Bat2
- Bat3
- Lipid Panel
- Lipid Panel - LabStar

Test

- Cholesterol - Total
- Triglycerides
- VLDL Cholesterol CAL
- HDL
- LDL - LabStar

# The Patients Page

The patient page displays the list of patient records on the left. The test result records is displayed on the right for the highlighted (or selected) patient.

**Add Results:** adds one or more test results to the selected patient. Results can be added individually or by battery. Each test result in an entry "batch" will be given an internal date/time stamp that can be used to group the result with the other results entered in the batch. Right-click a test result to see a pop-up menu of options.

Restrict selection to 8/13/2015  
Gather this batch

**Restrict Selection:** Only results collected between the entered dates will be displayed when clicking a patient, searching, or clicking the "Show All" button.

Patients: 3 Total, 3 Showing, 1 Highlighted

Patients | Test Types

Buttons: Add Patient, Show All, Hide Selected, Delete, Edit Patient, Quick Report, Hide Others

Last	First	Birth	ID
Renzenhauser	Michael M	10/10/2001	ABCD1234
Bleaze	Terry	10/11/1950	KDLFK-9394
Jone	Mary	10/10/1966	NO ID 2

Search Name: Search All

Mary Jone Print Preview

Buttons: Add Results, Show All, Restrict Selection (From: 08/19/2015, To: 08/19/2015), Hide Selected, Delete, Print, Hide Others, Display Order, Edit Letterhead

Test	Taken	Result
LDL	8/19/2015	60   65   75
LDL - LabStar	8/19/2015	55   68   75
FT3	8/19/2015	2.1   3.2   3.8
FT4	8/19/2015	0.82   1.15   1.63
Progesterone	8/19/2015	2.6   17   21.5

5 Total, 1 Highlighted

Double-click a line to open the editing window.

Edit a Patient

Buttons: First, Previous, Next, Last, Cancel, Accept

ID: NO ID 2 | Sex: F

First / Last: Mary | Jone | Birthday: 10/10/1966

Notes:

3 of 3

Edit a Result

Buttons: First, Previous, Next, Last, Cancel, Validate

NameFull: Mary Jone

Name: Progesterone

Display Name: Progesterone

TestDate: 08/19/2015

TestTime: 11:24:54

Lower: 2.6

Upper: 21.5

TestValue: 17

Notes:

8 of 8

Graphical representation: Progesterone result of 17 on a scale from 2.6 to 21.5.

## Adding Results

Add results by selecting a patient and clicking the “Add Results” button.

The entry window opens and all available tests are displayed in default order. Only tests with the “Add” column checked will have a test result recorded. The “Add” column of a test will be checked when: a value is entered in the “Lower”, “Upper”, “Result”, or “Notes” columns, the “Add” column is explicitly checked, or a battery is selected.

Clicking the “Show All” button, or selecting a battery will display the new selection of tests to be entered. These controls assume you want to restart the entry, and will clear any values that have been entered since the window was opened.

The Collected Date and Time default to the current date and time. Change these, if needed, to the date and time of the test set that is being entered.

Click the “Accept” button to add these tests’ results to the patient. Click “Cancel” to exit without creating new records.

## Samples

Test Entry

Collected :  
Date : 08/22/2015  
Time : 2:30 PM Example 1:15 PM can be entered as 1:15p

Mary Jones

Cancel Accept

Select Battery

Code	Test	Lower	Upper	Result	Add	Notes
	Cholesterol - Total	100	199	0	<input type="checkbox"/>	
	Triglycerides	0	149	0	<input type="checkbox"/>	
123-4	HDL	39	100	0	<input type="checkbox"/>	
	VLDL Cholesterol CAL	5	40	0	<input type="checkbox"/>	
123-5	LDL	0	99	0	<input type="checkbox"/>	
	LDL - LabStar	0	75	0	<input type="checkbox"/>	
	DHEA-S	8	188	0	<input type="checkbox"/>	
	FT3	2.1	3.8	0	<input type="checkbox"/>	Default to add to each test result as it is created.
	FT4	0.82	1.63	0	<input type="checkbox"/>	
	RT3	8	25	0	<input type="checkbox"/>	
PT1	Progesterone	2.6	21.5	0	<input type="checkbox"/>	
	Testosterone	10	90	0	<input type="checkbox"/>	
	Testosterone - DecaLab	10	85	0	<input type="checkbox"/>	

When typing a Note, hold the command key and type the return key to add a new line to Notes.

Test Entry

Collected :  
Date : 08/22/2015  
Time : 2:30 PM Example 1:15 PM can be entered as 1:15p

Mary Jones

Cancel Accept

Lipid Panel - LabStar

Code	Test	Lower	Upper	Result	Add	Notes
	Cholesterol - Total	100	199	0	<input checked="" type="checkbox"/>	
	Triglycerides	0	149	0	<input checked="" type="checkbox"/>	
	VLDL Cholesterol CAL	5	40	0	<input checked="" type="checkbox"/>	
123-4	HDL	39	100	0	<input checked="" type="checkbox"/>	
	LDL - LabStar	0	75	0	<input checked="" type="checkbox"/>	

When typing a Note, hold the command key and type the return key to add a new line to Notes.

Test Entry

Collected :  
Date : 08/22/2015  
Time : 2:30 PM Example 1:15 PM can be entered as 1:15p

Mary Jones

Cancel Accept

Lipid Panel

Code	Test	Lower	Upper	Result	Add	Notes
	Cholesterol - Total	100	199	0	<input checked="" type="checkbox"/>	
	Triglycerides	0	149	0	<input checked="" type="checkbox"/>	
123-4	HDL	39	100	0	<input checked="" type="checkbox"/>	
	VLDL Cholesterol CAL	5	40	0	<input checked="" type="checkbox"/>	
123-5	LDL	0	99	0	<input checked="" type="checkbox"/>	

When typing a Note, hold the command key and type the return key to add a new line to Notes.

Test Entry

Collected :  
Date : 08/22/2015  
Time : 2:30 PM Example 1:15 PM can be entered as 1:15p

Mary Jones

Cancel Accept

Select Battery

Code	Test	Lower	Upper	Result	Add	Notes
	Cholesterol - Total	100	199	0	<input type="checkbox"/>	
	Triglycerides	0	149	0	<input type="checkbox"/>	
123-4	HDL	39	100	0	<input checked="" type="checkbox"/>	
	VLDL Cholesterol CAL	5	40	0	<input checked="" type="checkbox"/>	
123-5	LDL	0	99	0	<input checked="" type="checkbox"/>	
	LDL - LabStar	0	75	0	<input type="checkbox"/>	
	DHEA-S	8	188	0	<input type="checkbox"/>	

When typing a Note, hold the command key and type the return key to add a new line to Notes.

Test Entry

Collected :  
Date : 08/22/2015  
Time : 2:30 PM Example 1:15 PM can be entered as 1:15p

Mary Jones

Cancel Accept

Bat1

Code	Test	Lower	Upper	Result	Add	Notes
123-5	LDL	0	99	0	<input type="checkbox"/>	
	FT3	2.1	3.8	0	<input checked="" type="checkbox"/>	Default to add to each test result as it is created.
	FT4	0.82	1.63	0	<input checked="" type="checkbox"/>	
PT1	Progesterone	2.6	21.5	0	<input checked="" type="checkbox"/>	Test 0.5mg

When typing a Note, hold the command key and type the return key to add a new line to Notes.

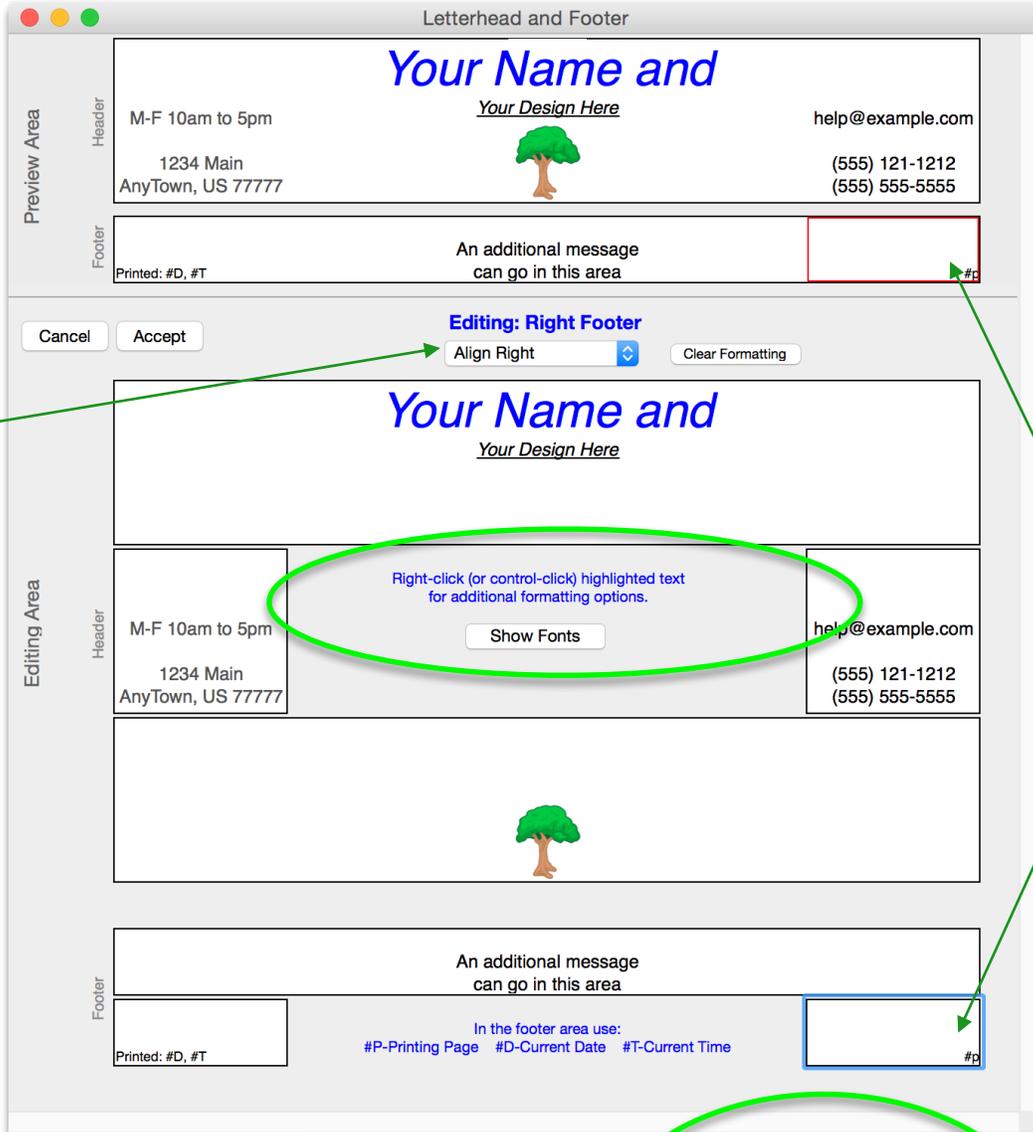
## Creating a Letterhead

The letterhead can be left blank to use pre-printed forms. To create a letterhead click the “Edit Letterhead” button in the patient window. The top part shows a **preview** of the header and footer areas. The bottom is used to **edit** the sections.

The **header section** consists of a centered text area the width of US Letter, a left text area, a right text area, and a picture area.

The **footer section** consists of a centered text area the width of US Letter, a left text area, and a right text area.

Text in the text areas can be formatted by selecting all or a portion of the text. Right-click to see the format menu, or click the “Show Fonts” button to style the selected text.



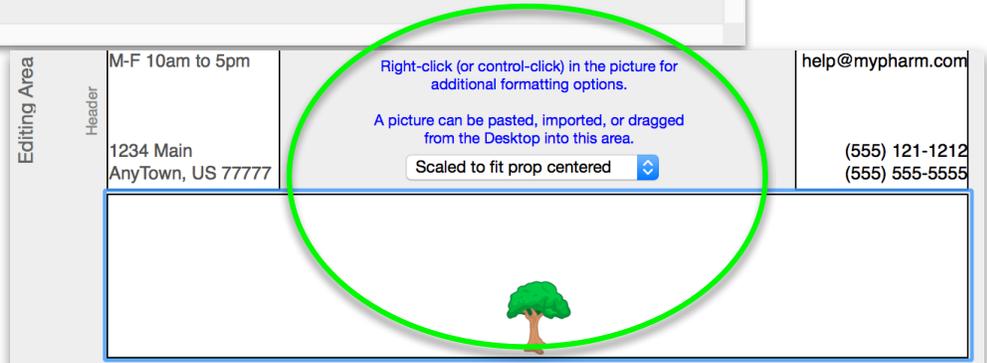
Each text area can be aligned left, center or right.

Click or tab into an area. Select its alignment from the pop-up menu.

The red box indicates which area below is being edited.

When the picture area is selected, the formatting options change.

The picture is displayed behind the text areas. Text is not required to be entered and the letterhead can be made of only the picture.



## The Test Results Window

The Test Results window allows searching, sorting and reporting of all test results collected in the database. “Quick Reports”, “Statistics”, and “Copy Results” will act on the highlighted records, or on the entire selection if one or no record is highlighted.

Search a column by entering text in the areas above the columns or use the *Query* editor.

Order a column by clicking in the column’s title area. A second click will reverse the order. More specific ordering can be accomplished using the *Order by* editor .

Print and export data using the *Quick report* editor.

“Statistics” presents the statistics shown below in a text entry area. The contents can be copied to the clipboard.

Average	2.775
Minimum	2
Maximum	3.4
Standard Deviation	0.443202630214
Sum Squares	62.98
Variance	0.1964285714286

“Copy Results” will copy the test results to tab, comma, or carriage return delimited text on the clipboard.

Test Results: 48 Total, 48 Showing, 8 Highlighted

Show All
Query
Quick Report
Statistics

Hide Selected
Order Selection
Copy Results ▼

Hide Others

Search Name		Sex	Test				Notes					
Last	First	DOB	Sex	Collected	Collected	Test Name	Code	Lower	Result	Upper	Result	Notes
Jone	Mary	10/10/1966	F	08/13/2015	00:00:00	FT3		2.1	3.1	3.8		FT3 Notes by default
Jone	Mary	10/10/1966	F	08/19/2015	11:24:54	FT3		2.1	3.2	3.8		FT3 Notes by default
Jone	Mary	10/10/1966	F	08/13/2015	00:00:00	FT4		0.82	1.2	1.63		
Jone	Mary	10/10/1966	F	08/19/2015	11:24:54	FT4		0.82	1.15	1.63		
Jone	Mary	10/10/1966	F	08/19/2015	11:24:54	LDL	123-5	60	65	75		
Jone	Mary	10/10/1966	F	08/19/2015	11:24:54	LDL - LabStar		55	68	75		
Jone	Mary	10/10/1966	F	08/19/2015	11:24:54	Progesterone	PT1	2.6	17	21.5		
Jone	Mary	10/10/1966	F	08/13/2015	00:00:00	Progesterone	PT1	2.6	17	21.5		Additional information
Bleaze	Terry	10/11/1950	M	08/13/2015	00:00:00	DHEA-S		8	100	188		
Renz...auser	Michael M	10/10/2001	M	08/08/2015	13:15:00	DHEA-S		8	99	188		
Bleaze	Terry	10/11/1950	M	08/13/2015	00:00:00	DHEA-S		8	150	188		
Renz...auser	Michael M	10/10/2001	M	08/04/2015	10:00:00	DHEA-S		8	87	188		
Bleaze	Terry	10/11/1950	M	08/13/2015	00:00:00	FT3		2.1	2.5	3.8		FT3 Notes by default
Bleaze	Terry	10/11/1950	M	08/13/2015	00:00:00	FT3		2.1	3	3.8		FT3 Notes by default
Bleaze	Terry	10/11/1950	M	08/19/2015	09:19:25	FT3		2.1	2	3.8		FT3 Notes by default
Renz...auser	Michael M	10/10/2001	M	08/19/2015	12:06:29	FT3		2.1	3.4	3.8		FT3 Notes by default
Renz...auser	Michael M	10/10/2001	M	08/19/2015	12:06:29	FT3		2.1	2.9	3.8		FT3 Notes by default
Bleaze	Terry	10/11/1950	M	08/04/2015	10:00:00	FT3		2.1	3	3.8		Notes go here
Bleaze	Terry	10/11/1950	M	08/09/2015	00:00:00	FT3		2.1	2.4	3.8		FT3 Notes by default
Renz...auser	Michael M	10/10/2001	M	08/08/2015	13:15:00	FT3		2.1	3	3.8		FT3 Notes by default
Renz...auser	Michael M	10/10/2001	M	08/04/2015	10:00:00	FT4		0.82	0.7	1.63		pglme
Renz...auser	Michael M	10/10/2001	M	08/19/2015	12:06:29	FT4		0.82	1.1	1.63		
Renz...auser	Michael M	10/10/2001	M	08/19/2015	12:06:29	FT4		0.82	1	1.63		
Bleaze	Terry	10/11/1950	M	08/19/2015	09:19:25	FT4		0.82	0	1.63		
Renz...auser	Michael M	10/10/2001	M	08/08/2015	13:15:00	FT4		0.82	1	1.63		

The Editors are described in detail in the 4D Design Reference Manual:

Query: <http://doc.4d.com/4Dv15/4D/15.1/Query-editor.300-2679453.en.html>

Order by: <http://doc.4d.com/4Dv15/4D/15/Order-by-editor.300-2045316.en.html>

Quick report: <http://doc.4d.com/4Dv15/4D/15.1/Introduction.300-2679507.en.html>