Custom Report Writer

The Custom Report generator offers the user a quick report generator and query facility.

Reports Menu

To create or change existing custom reports click on **Custom Report Setup** under the **File** menu. This will place a **Reports** option on the top menu bar to the **LEFT** of the **CDM+** option*. The options in the **Reports** menu are divided into four groups; the first group of four commands act on all Custom report files on the disk, the next two groups refer to the current Custom Reports window. The fourth group expands to list all open custom reports.

NOTE 10.1: If you have entered Custom reports while in any other CDM Plus module (from within Membership, Attendance, Contributions or Accounting), there will appear two **Reports** options on the top menu bar. The **Reports** menu item to the RIGHT of the CDM+ on the menu pertains to the module you are using. The **Reports** to the LEFT of CDM+ on the menu pertains to Custom Reports.

New - Allows you to open a window to create a new custom report. This will bring up a *Select template for new report* window. Click to highlight the various templates to preview, double click to select the desired template.

Open - Allows you to open an existing custom report.

Print - Allows you to select a custom report and send it directly to the printer.

Export - Allows you to select a custom report and export it in one of eight export formats to a file, port, or clipboard.

Close - Click to close current custom report. If you attempt to close a custom report without saving you will be asked if you want to save before closing.

Save - You may also press Ctrl-S/Cmd-S on the keyboard to save your work. After you have named the file once, your work will be saved to this same file.

Save as - Works the same as **Save**, but will allow you to choose a different file to save as.

Revert to Saved - Will reload the file as it was when last saved. This is only available if you have changed a field or query.

Change Template - Operates on the current custom report to allow you to alter the report layout by exchanging it with another stored in the template file.

Parameters - Allows you to change the margins and page orientation for the current custom report.

Page Setup - Displays your printer's setup dialog.

At the bottom of the **Reports** drop down menu you will see a listing of all open custom reports. As each custom report file is opened from disk or created with the **New** option, the menu grows and the new file name is added.

Report Window

In the **Report** window, you enter the fields you require in the custom report and setup search, the sort and totaling parameters for the report. Before setting up the report, the **Add Fields** dialog box lets you select the initial set of fields. After this, the custom report generator opens the **Report** window.

The first four buttons in the tool bar are called, from left to right, **Fields**, **Customize**, **Output**, and **Rebuild**:

Fields - displays the **Field List**

Customize - displays a report design screen where you can make layout changes that affect the visual appearance of the printed output

Output - displays the output. If you are creating a new report, the first time you click on this button it will generate a new table of records from the current query. You can select data from the output screen by dragging the mouse over it to draw a box around the desired data and selecting **Copy** from the **Edit** menu. This copies a tab-delimited version of the data to the clipboard.

Rebuild - displays the output, bringing it up to date by generating a new table of records from the current query.

It is easy to display the **Fields**, **Customize**, and **Output** views but it takes some time to see the results of the **Rebuild** button. The **Output** button is useful if you want a quick look at the previous results and see what changes you need to make, either to the query lines or report layout, before rebuilding.

The next two buttons are **Print** and **Export.**

Print - sends the current output to the printer.

Export - displays the *Set export type and destination* dialog window. If you are exporting information to open in a spreadsheet, the type should be delimited and the destination should be file.

Building A Custom Report

The **Fields** button displays the **Field List** and parameters needed for creating the custom report. In this view there are several buttons. For descriptions of the first six buttons, Fields, Customize, Output, Rebuild, Print and Export, see **Report Window** above.

Three pop-up menus, **Field**, **Sort**, and **Query**, are available along the top of the window. These are described later.

Within the **Field List** display of the **Reports** window you also have three views to choose from. The three buttons on the right of the **Query** pop-up menu on the **Field List** window relate only to the **Field List** and change the information shown for the fields. All three views show sort order and other field information to be discussed later.

Query - the default view shows the query.

Title/Format - shows the text labels and formatting commands selected for each field in the list.

Calculations - displays the calculations used to work out the values of any calculated fields.

Query

In the **Query** view, you see and choose all query information needed for your report table. How to create and edit queries is explained in detail later.

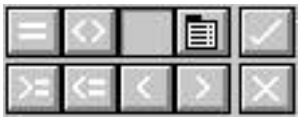
Title/Format

In the **Title/Format** view, you specify the text label required for each field in the report. For column reports, the title is placed at the top of the column. You can also include a formatting command so that the data for that field is displayed in the required form: centered, right-justified, converted to a string/number/date, etc. The format commands are those used in the **jst()** function. So, to center a field and title it NAME, the title\format entry is: **NAME\^**. A selection of useful formatting strings are provided under **Format** on the **Field** pop-up menu. Placing a number after the slash sets the maximum number of characters to be displayed for that field, for example: **NOTES\15** truncates the NOTES field to 15 characters.

Calculations 1+2

In the **Calculations** view you will see all calculation strings as well as sort order. Selecting a calculated field displays the string in the text field where it may be edited. See Adding Calculations below for further details.

Operators/Comparisons



There are also several operator buttons, **=**, **<>**, **>=**, **<=**, **<**, **>**, **Comparison**, **Check Mark** and **X**, located just below the first four display buttons. These operator buttons are used when entering queries and are only available when you are in the **Query** view. The **Check Mark** and **X** buttons are used to confirm or cancel any text you type into the text entry area at the top of the window. If you use a spreadsheet, you will be familiar with this system.

Operator buttons are:

Equal to	**=**
Not equal to	**<>**
Greater than	**>**
Greater than or Equal to	**>=**
Less than or equal to	**<=**
Less than	**<**

Comparisons - This is a pop-up menu containing comparisons which may be used for queries. These menu items will be discussed in detail later.

Check Mark - Selecting the **Check Mark** (or pressing **Return/Enter** on the keyboard) removes the editing cursor so that no additional or extraneous text is entered into the text entry box.

X - Cancel to remove query information that has just been entered into the text entry box.

The result of a query is always a table of records. The table can be printed using the report template and the printed output can be customized by adding graphics, color, and so on to the report layout.

Field

The **Field** pop-up menu allows you to add, edit and format fields in the *Report* window. This is where parameters for the report are selected and defined

Add Fields - Is used to select the files and fields to be used in the report. This window is opened automatically when you create a new Custom report. For an existing report you may add fields be clicking the **Fields** button and selecting **Add Fields** from the pop-up menu.

To select a file, you can either double-click on a file name line, or select the line and use the appropriate **Select/Deselect** button. As you double-click on a file name in the top list, it is checked.

Having selected a particular file, you can now add fields to the **Field list** by either double clicking on the individual field names in the lower list, Ctrl/Cmnd-clicking to select a group of fields and using the **Add** buttons **(Add and continue** or **Add and finish**), or clicking on the **Select all fields**.

Add and continue - adds the selected field(s) to the **Field list** keeping the *Add fields* dialog window open and ready to continue.

Add and finish - adds the selected field(s) to the **Field list** and closes the *Add fields* dialog window and returns you to the *Field list* window

Select all fields - selects the complete set of fields for a the selected file.

Finish - closes the *Add fields* dialog window and returns you to the *Field List* window

If you add fields to a report and then deselect the file to which they belong, their values in the report become constant: Omnis does not step through that file when the output table is built. Thus, if you want to remove a file's fields from a query, you must use the standard **Cut** option to delete the fields from the **Field list** and also deselect the file.

The standard Edit menu options can be used to edit the **Field lists**. When inserting fields in an existing list, you can click between lines to create an insertion point (shown as a horizontal marker).

Add Calculation - opens the *Add Calculation* dialog in which you can create calculated fields for inclusion in the report. See **Adding Calculations** below for further details.

Add AND - places a Boolean AND operator at the current insertion point or at the end of the list if no insertion point is selected.

Add OR - places a Boolean OR operator at the current insertion point or at the end of the list if no insertion point is selected.

Add Comment - allows you to include a text comment line in the **Field list**; for example a description of what you use a query for could be added to the first line.

Alter Name - having set up an initial **Field List**, you use this option to replace a selected file in the list by another field name.

Invisible - invisible fields can be included in the **Field list** for the purposes of query, but they are omitted from the output; if a calculation is based on a field that you do not want printed out, you may include that field and make it invisible.

Totaled - To include a field in the totals section of the report, you select the field's line in the Field list and select the Totaled option from the Field menu. If the field is included in the sort with the Subtotals attribute, a subtotal will also be printed for that field when it changes value.

Format - opens the hierarchical menu of field formatting options.

Selecting a format code for a field in the list will cause the field to be reformatted before being displayed. The standard options Left, Right, and Center allow the justification of the field to be specified.

In addition, a selection of useful numeric and date format codes is provided. The codes correspond to those used with the jst() function and are displayed next to the fields in the list if the Options and Titles view is selected.

Editing the Field List

You can insert and delete fields from the Field List using the **Edit** menu items Copy, Cut Paste, Clear and Select All. To insert a field in the list, you click between two lines where the broken lines indicates the insertion point. You will notice how the cursor changes as you position it between two lines. Copies of existing fields can be inserted, or the **Add Fields** option in the **Field** pop-up menu can be used to select new files and fields.

Double-clicking on a blank line opens the *Add fields* dialog. Double-clicking on an existing field line allows you to change the field for that line. Double-clicking between two field lines inserts a new blank field between the two and displays the *Add fields* dialog.

Note: if you insert more that one copy of a particular field in the list, it will appear only once in the report layout and be printed once.

You can change the report layout using one of the templates by selecting the **Change Template** option in the Reports menu. When you do this, you lose any modifications you have made to the previous report layout.

Adding Calculations

In the Field List you can have either fields of Boolean operators such as AND and OR. You can also add calculated values to the list; calculations are based on fields taken from the current line in the table, or values read from the current record buffer. The calculations are created or edited by selecting **Add Calculations** from the **Field** pop-up menu. This brings up the *Add calculated field* dialog window. If you wish to change an existing calculation click and highlight the name of that particular calculation in the scrollable column on the left side of the window, then either click or tab into the Calculation field to make appropriate adjustments. If you are creating a new calculation, click and highlight <empty>, then either click or tab into the Name: field and give the calculations a name; each calculation is named so that it appears in the report with a column/field label. Click or tab to the type field and select the proper one for the calculation you are performing. If you are using functions, such as pick(), con(), jst(), etc., the type should be general. (A table of functions can be found in Appendix B). Once the type has been highlighted, tab or click into the Calculation field.

When you are finished entering or editing the calculation, you may click one of four buttons on this window. **Add and continue**, **Add and finish**, **Undo changes** or **Finish**.

Add and continue - adds the calculation to the **Field list** keeping the *Add calculated field* dialog window open.

Add and finish - adds the calculation to the **Field list** and closes the *Add calculated field* dialog window and returns you to the *Field List* window

Undo changes - will undo all changes made since opening the *Add calculated field* dialog window. Clicking this button a second time before making any other changes will redo what was just undone.

Finish - closes the *Add calculated field* dialog window and returns you to the *Field List* window

Sort

The **Sort** pop-up menu allows you to set parameters of how you want your table of records sorted and/or subtotaled

Sort First - makes the selected field in the list the first level sort field

Records are sorted in order of this field after all the sublevels have been sorted. A numeral "1" is placed alongside the field in the sort column.

Sort Last - makes the selected field the lowest level sort field

The sort level number is placed alongside the field in the Sort column. Nine sort fields are allowed. The records are sorted in order of sort field 9, then 8 and so on.

No Sort - removes the selected field from the sort field list and renumbers the remaining sort fields accordingly. (e.g. if you no longer need to sort by your level 3 sort, you can click on that field and click No Sort, in so doing, the sort will be removed from this field and all succeeding sort levels will be renumbered, level 4 will become level 3, level 5 will become level 4, and so on.)

Descending - causes records to be sorted in descending order of this field

Upper Case - converts the field's values to upper case for the purpose of the sort order; produces a case insensitive sort order, but prints the original data as entered.

New Page - used with a sort field, this starts a new page when the sort field value changes

Subtotals - if the selected field is totaled (see Field pop-up menu), selecting the Subtotals option causes the field to trigger a subtotal section when its value changes; this can be selected only for fields in the sort list

Clear all Sorts - will clear all sort levels and in so doing will also clear subtotals from the current report.

Adding a Sort Order

Assuming that the field list is complete, you may now want to sort the report into a particular order. A multi-level sort can be set up using the Sort pop-up menu items Sort First and Sort Last. To add a sort:

- Click on the Fields button to go back to the Field list
- Select the line for the required field you wish to sort
- Click on the Sort button and select Sort First

A number 1 is added to the Sort column next to the sort field, and an up or down icon indicates the direction of the sort. You can create a multi-level sort by selecting each successive field with the **Sort Last** option. As each field is selected, the next sort level number is assigned to that field.

You can add fields to the top or the bottom of the sort list using the **Sort First** and **Sort Last** options. To change the sort order of a group of fields, you must first clear the fields' sort order by using the **Clear All Sorts** menu item and then start again.

When the table of records is sorted, sorting is first done at the highest numbered level for example, level 9, then level 8, and so on. Thus, in a three-level sort table of records, the field with the broadest category Country would have sort level 1, the Field State/County would have sort level 2 and Town, sort level 3.

For each sort level, you can select the options described below. Each is represented by a small icon next to the field in the **Field list**. These are displayed as follows:

Descending - a down arrow; the records print in descending order (Note the default is an ascending sort and is displayed by an up arrow unless **Descending** is selected here.

Upper case - a U; converts the field values to upper case before sorting

New page - an N; triggers a new page whenever the sort field changes values

Subtotals - an S; triggers the printing of subtotals when the sort field changes value

To include a field in the totals section of the report, you select the field's line in the Field list and select the Totaled option from the Field menu. If the field is included in the sort with the Subtotals attribute, a subtotal will also be printed for that field when it changes value.

Adding a Query

For each entry in the Field list, you can specify a query that must be fulfilled if a particular record is to be included in the table. You may use the comparisons previously discussed with Boolean Logic

OR Logic

The operators can be typed in from the keyboard or selected by clicking on the appropriate button. For each entry in the Field list, a query line can be created using a comma-separated list of comparison.

To create a simple query:

- Select a field in the list
- Click in the Query entry box
- Click on a comparison operator

Note: String delimiters are not required; for example the town Birmingham should not have quotes around it.

AND Logic

A query with more than one equal operator will always assume that the connecting logic is OR (as described earlier). A comparison with <,>,<=,>=,<> assumes AND logic.

When the query line is being edited, the check and X buttons are effectively OK and Cancel and can be used to confirm or cancel the last edit (just as you would in a spreadsheet program). The Return key is the equivalent to the check button.

Numeric fields can include query lines with calculated values:

C_BALANCE >= #1*12/100

Boolean fields take values of YES, 1, NO, 0, '' (two single quotes for empty), or Null. Date and times are entered according to the formatting string selected for the field in the file format. For example, PO_DATE is a date field with format Y,m,d. The query line used to select dates before 23 Nov 90 is:

PO_DATE <=90 Nov 23, not null

Customizing the Printed Output

The **Customize** button displays the report layout that is used to create the Custom report. This screen doesn't allow fields and sections to be added to the report layout. Deleting fields from this screen removes the display of the field values from the report output; however, the searches, calculations, sorting and subtotals of the affected fields still appear. The role of this screen is to allow cosmetic changes to be made to the report output, such as adding your own graphics, changing fonts, and moving fields.

As with the display of the Field List, the first six buttons in this view are Fields, Customize, Output, Rebuild, Print, and Export. These buttons are discussed in detail above. Under these buttons you will find six tool buttons

Arrow (Pointer) - When this button is depressed you can select, move and resize fields, headers, titles, etc.,

Text - When selected, the mouse pointer will change to a cross. Position the mouse where you want to insert text and click. It will become a vertical insertion point and create a new field at that point

Box -

Rounded Corner Box -

Ellipse -

Line -

Next to the buttons are design tools. The top row (bucket) is fill, center (pencil) is frame, and bottom (A) is text.

Fill -

Frame -

Text -

Next to the design tools is a thumbnail display of your selected design. To the right of this are two pop-up menu buttons, **Customize** and **Text**. From the **Customize** pop-up menu you may **Insert Line** or **Delete Selected Line**. The Text pop-up menu allows you to format and justify the text.

Font - with this drop down menu you may select one of five fonts or change the font table.

Size - this drop down menu allows you to select one of seven font sizes, adjust up or down by one font point size or bring up a font size dialog box by clicking on Other sizes.

Style - Choose the style of text, Plain, Bold, Italic or underline. Default is Plain text

Left - Click here to left justify

Right - Click here to right justify

Center - Click here to Center

Extending - Click here to justify both right and left

Change Colors - allows you to change the default color map

The page heading section (printed once at the top of each page) contains text strings in which certain field values are embedded. For example, the first string might be:
[AHF_NAME] as at [jst(#D, 'dtc')]

The square bracket notation causes the text within the brackets to be evaluated. [AHF_NAME] returns the name of the report and the second square bracket expression evaluates today's date. The date is converted to a display format using the conversion string given in the second jst() parameter.

In the Subtotals section, you will find the text string:
Subtotals for [nam(#SUBFLD)] equal to [#SUBFLD]

#SUBFLD is a system variable that refers to the field that causes the subtotal section to be printed. The nam() function returns the name of the subtotal field as a string and [#SUBFLD} returns its value.

To improve the look of your report, you might wish to add a company logo or some line art to the heading. Logos drawn in graphics programs can be pasted from the clipboard using the Paste menu item in the Edit menu.

Viewing the Output

The **Output** button displays the report table. The role of this screen is to allow you to see the report output. As with the Field List and Customize displays, the six buttons in this view from left to right are **Fields**, **Customize**, **Output**, **Rebuild**, **Print**, and **Export**. These buttons are discussed in detail above.

You will also note the **P** just above the scroll bar to the right of the screen. Clicking on this **P** will display a pop-up menu where you may opt to **Show Paged Report**, **Open Page Preview**, **Print Page** or **Print Report**.

Generating a Report Table

The **Rebuild** button, like the **Output** button, displays the report table, but first generates/regenerates the information to conform to any design or field list changes, then displays the output as described in the 'Viewing the Output' section above.

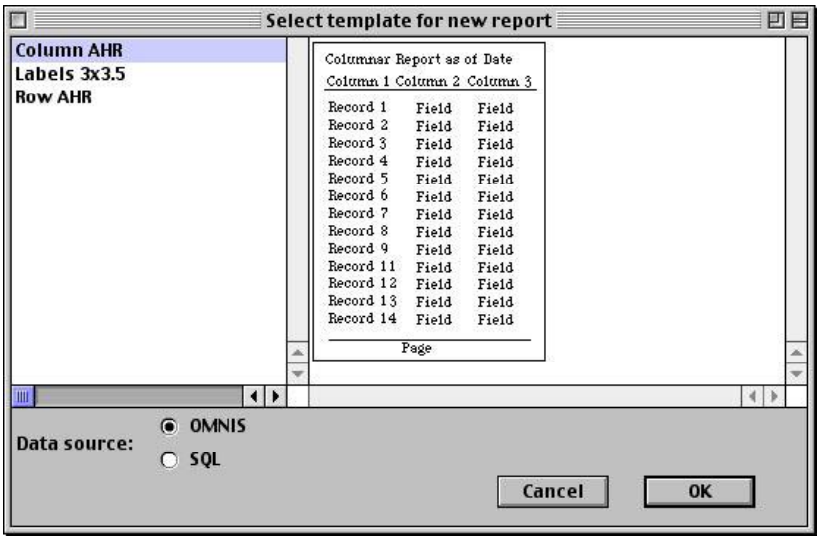
Creating a Custom Report from Start to Finish

So now that we have all the techno stuff explained, lets put together a report. First off, you need to know what information you want in your report. For this first report lets start out with a report with one simple query, a list of all children and their parents.

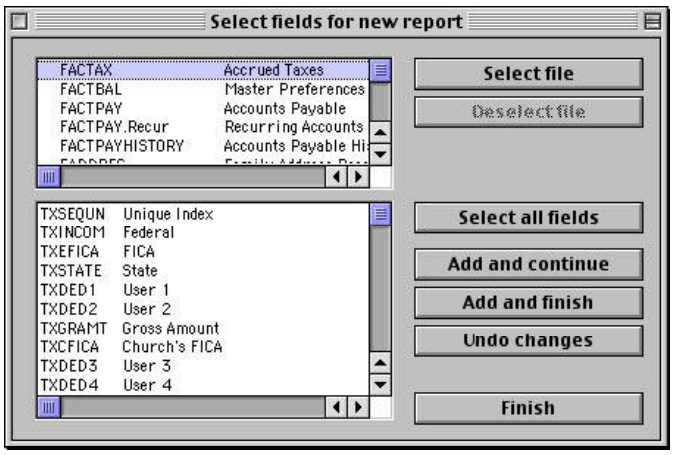
Creating a New Report

1- Under **FIle** on the CDM+ menu bar select **Custom Report Setup**. A new menu item, **Reports**, will appear to the left of **CDM+**.

2- Click on New in the Reports drop down menu to bring up the *Select template for new report* dialog window.



3- Click on ***Columns.AHR***, ensure that OMNIS is selected as the Data source: below, then click the OK button. This will bring up the *Report* window and a *Select fields for new report* dialog window.

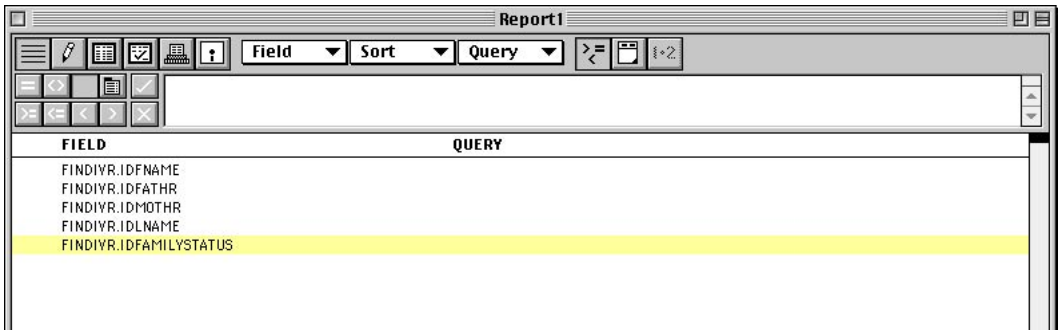


NOTE 10.2: If your screen resolution is 800 X 600 or less your dialog window will be off to the right of your screen. If this is the case click on the dialog window label and drag the window to the left so that the window may be seen in its entirety.

4- On the top section of *the Select fields for new report dialog* window, scroll down and click on FINDIVR (Individual Records). All the fields from Individual records will now be displayed in the field (lower) section of this dialog box. Click on IDFNAME, then Cmnd/Ctrl-click on IDFATHR, IDMOTHR, IDLNAME and IDFAMILYSTATUS. Then click the **Add and finish** button.

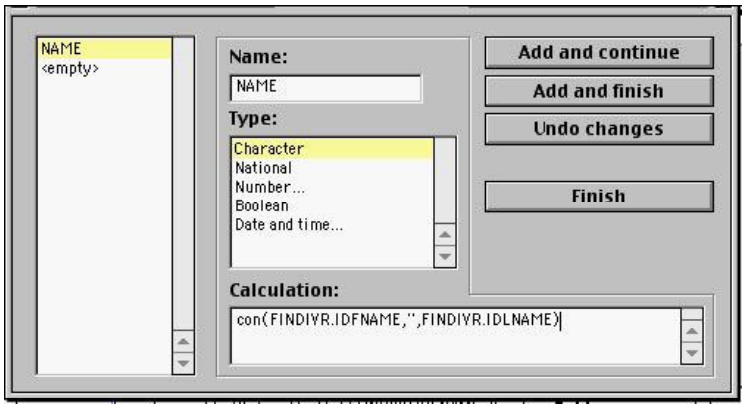
5- You should now see all the selected fields in the field list. If you click on the **Rebuild** button you will see that all individuals in your database are displayed on the report. But we want only children, so we need to perform a query.

6- Click on the **Fields** button to show the *Field List*.



7- Click and highlight FINDIVR.IDFAMILYSTATUS, then click on the **Equals** Operator button. You should now see = and a flashing insertion point next to the **Check Mark** button. Type a C at the insertion point and then pressr **Return/Enter** or click on the **Check Mark** button to finish your query. Now if you click on the Rebuild button, only those individuals with family status of Child should be displayed.

8- Now let's work on the display. First, rather than having separate columns for first and last name let us concatenate them into one field. We can do this in the Field List as a calculation. Click on the **Fields** button. Now click on the Field pop-up menu and select **Add Calculation** to bring up the *Add calculated field* dialog window. You may need to click and drag this window over to the left to display the window in it's entirety.



9- **<empty>** should be highlighted. Click or tab into the **Name:** field and give the calculation a field name, such as NAME. Leave the **Type:** as Character and tab or click into the calculation field. We will use the concatenate function, con(), to combine the first and last names. We will also need a space between the two names. The space is considered text which is designated by single quotes. Each field being combined or concatenated is separated by commas. Therefore type the following: con(FINDIVR.IDFNAME,' ',FINDIVR.IDLNAME)

10- Click on **Add and finish**. The *Add calculated field* dialog window will disappear. NAME now appears at the bottom of the list of fields If you click on the **Rebuild** button and scroll to the right you will see there is now a column for NAME.

11- Return to the *Field List* by clicking on the **Fields** button . We are going organize the fields in the order we wish them to appear on the output. Click and highlight NAME. Then click on Cut from the Edit drop down menu. Position the mouse just above FINDIVR.IDFATHR, but below FINDIVR.IDFNAME. When the mouse pointer changes to a horizontal insertion point click to put an insertion line across the window. Then click on Paste on the Edit drop down menu. NAME should now follow FINDIVR. IDLNAME.

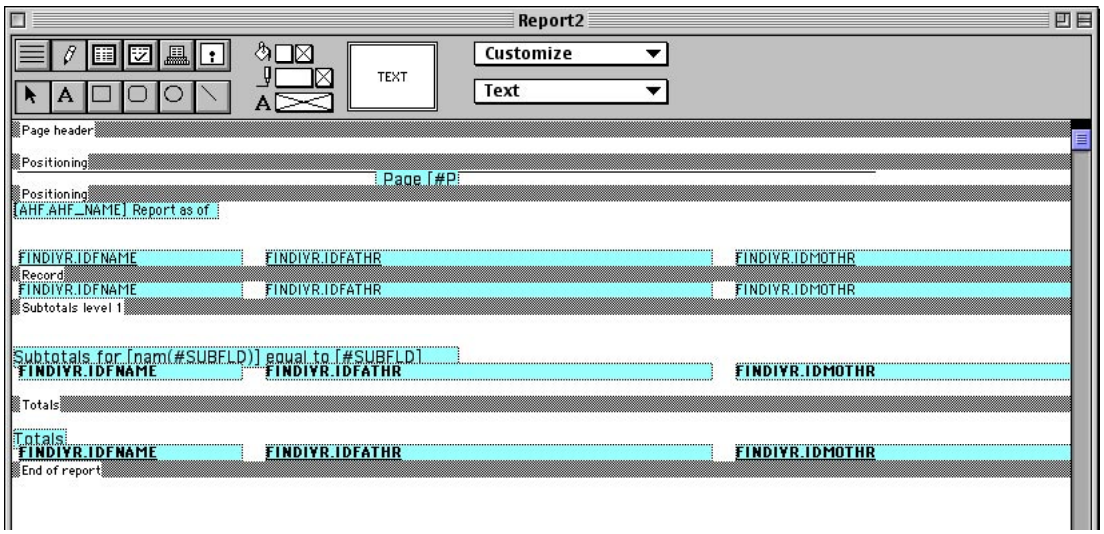
Since we now have a display of the first and last name as one field, we do not need to display the first and last names separately. So let's make these fields invisible.

12- Click and highlight FINDIVR.IDFNAME, then click on **Invisible** from the **Field** pop-up menu, or press Ctrl-I on the keyboard. This will place a small icon with an I on the FINDIVR.IDFNAME row. Repeat this process to make FINDIVR.IDLNAME invisible. Click on the **Rebuild** button to generate and display the output.

The report table is looking better, however, the spacing could be improved and it would look nicer if the fields were renamed. These changes will be made in the Customize mode.

Customizing the Report

1- Click on the Customize button . Click on the first NAME field, then Shift-click on the other three NAME fields, to select all four. Position the mouse at the bottom-right corner of any one of these four fields. The mouse pointer should change to a yellow Arrow with a question mark. When this happens click and drag the mouse to the left, thereby reducing the size of the NAME field.



2- Click and Shift-click on the four FINDIVR.IDFATHR fields. Resize them as you did the NAME fields. The four fields should remain selected after they have been resized, if not select them again by clicking and shift-clicking as applicable. Click and drag the group of four to the left until they almost touch the right edge of the NAME fields.

3- Repeat the process above to resize and move FINDIVR.IDMOTHR next to FINDIVER.IDFATHR, then again to resize and move FINDIVR.IDFAMILYSTATUS next to FINDIVR.IDMOTHR.

4- Click on the **Rebuild** button to view your output. If the spacing is correct, we are ready to move on, if not, repeat the resize and move process in the **Customize** mode until you achieve the desired spacing on your output view before you proceed.

5- Click on the **Customize** button. Double-click on FINDIVR.IDFATHR. To obtain a text insertion point. Delete the unwanted title information and type FATHER. Do this for only the title field which is in the area above the Record. Similarly, change FINDIVR.IDMOTHR to MOTHER. Since we know that this is

a list of children, we really do not need to display the family status. Click on the **Fields** button, then click on FINDIVR.IDFAMILYSTATUS. Click on **Invisible** on the **Field** pop-up menu.

6- Now click the **Rebuild** button to re-generate and display the output. If your output is not the way you would like to see it displayed, you can further format and justify in the Customize mode. Click on the **Customize** button, and experiment with font and justification settings. Click on the desired field or title that you would like to change to select it. Then click on the **Text** button, and make the desired changes. You can also click on the tools to change font, fill and frame colors as desired.

Saving and Reviewing the Report

1- Click on **Save** from the **Reports** menu on the top menu bar to the left of the CDM+ menu item. Navigate to the Membership Folder/Subdirectory within the Reports Folder/Subdirectory in your Cdmplus Folder/Directory, and name the file something such as Child and Parents, and click on the **Save** button.

2- Now when you rebuild the file you will see the title, CHILD AND PARENTS.AHR Report as of Current Date.

3- If you do not want .AHR displayed as part of the title, you can fix that in the Customize mode. Click on the Customize button. Double-click on [AHF.AHF_NAME] Report as of [#D]. This will put an insertion point in this title field. Delete [AHF.AHF_NAME] and replace with the title you want displayed on your report. If you do not want the date and title displayed you can delete this field by clicking on it to select it then clicking on Cut from the Edit drop down menu.

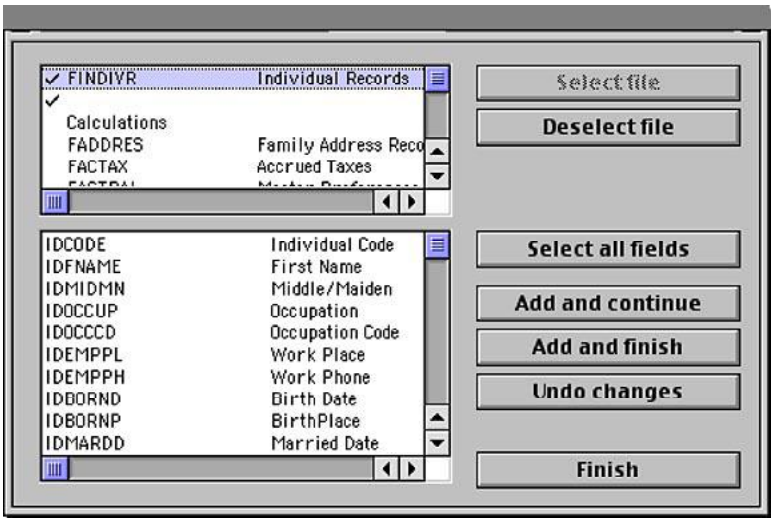
You now have a basic report.

Further Customizing the Report

We can further customize this report. Let's say you want to use preferred names if they exist rather than first names, and include last name suffixes as needed. In order to do this we need to add some more fields and extend our NAME calculation field to include this new criteria.

Save what you have by clicking on **Save as** from the **Reports** drop down menu, then clicking on the name that you have previously used to save as, then clicking the **Save** button. You will then need to click **Yes** on the warning dialog box to proceed.

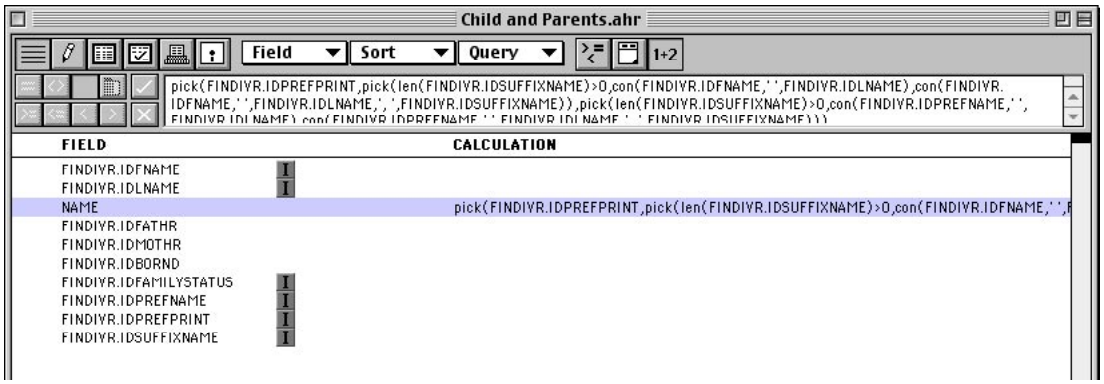
Click on the **Fields** button to bring up the *Field List* mode of the *Report* Window. Click on **Add Fields** from the **Field** pop-up menu to bring up the *Add fields* dialog window. (You may need to click and drag this window to the left to display the window in its entirety.)



The FINDIVR file should already be checked and highlighted. In the list of fields below scroll down and click on IDPREFNAME, then Ctrl/Cmnd-Click on IDPREFPRINT and IDSUFFIXNAME. Then click on the **Add and finish** button

The *Add fields* dialog window will disappear and you should now have three new fields added to the bottom of the field list. Make these three new field invisible.

Click and highlight, NAME. Click on the **Calculation** button 1+2. Currently this calculation is concatenating the first name, a text space, and the last name. We want the Name to be the preferred name if Use Preferred is checked on the individual record. We also want Name to contain a suffix if applicable. In order to determine if we need to use the Preferred name we will use the pick() function.



The pick function has three parts, the parameters, the If false instructions, and the If true instructions. We will also use the pick() function and len() functions to determine if we need to include a suffix for both the false and true instructions. When we are finished our calculation will contain three pick(), and four con() functions which will be performed in the order and in according with the following table.

Preferred	**Suffix**	**Concatenate**
False	False	First Name, Last Name
False	True	First Name, Last Name, Suffix
True	False	Preferred Name, Last Name
True	True	Preferred Name, Last Name, Suffix

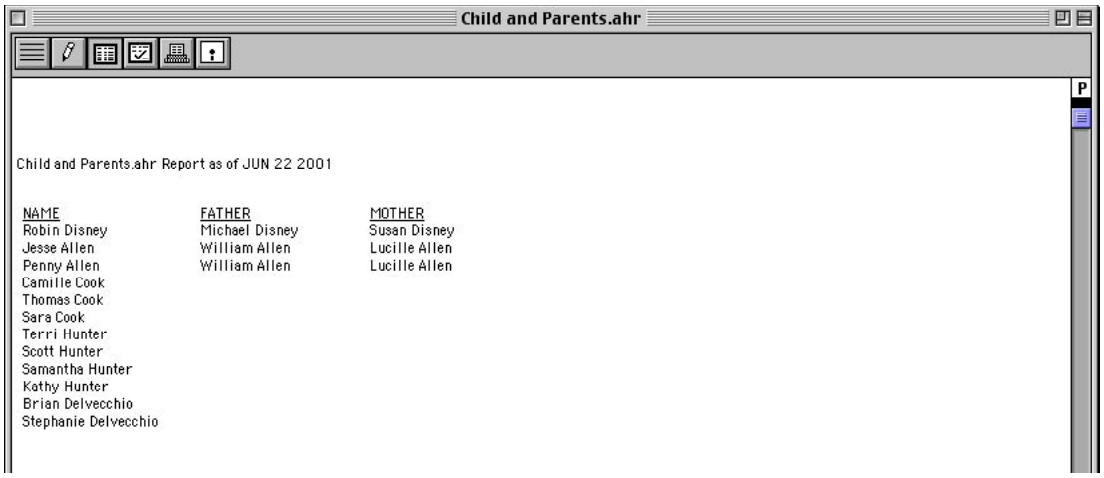
The current calculations, is the False-False concatenation. Therefore, we can put the insertion point at the beginning of the calculation (next to the Check Mark button), and type the following:
pick(FINDIVR.IDPREFPRINT,pick(len(FINDIVR.IDSUFFIXNAME)>0,

This comma should be followed by the False-False concatenation statement which is already there. So use the arrow key to go to the end of the concatenation function and type the False-True concatenation after the): ,con(FINDIVR.IDFNAME,' ',FINDIVR.IDLNAME,', ',FINDIVR.IDSUFFIXNAME))

Now we have the if False completed for the first pick statement, we must similarly include the if true, that is the True-False, and True-True concatenations in the above table. Type the following after the last): ,pick(len(FINDIVR.IDSUFFIXNAME)>0,con(FINDIVR.IDPREFNAME,' ',FINDIVR.IDLNAME),con(FINDIVR.IDPREFNAME,' ',FINDIVR.IDLNAME,', 'FINDIVR.IDSUFFIXNAME)))

The complete calculation is now:
pick(FINDIVR.IDPREFPRINT,pick(len(FINDIVR.IDSUFFIXNAME)>0,con(FINDIVR.IDFNAME,' ',FINDIVR.IDLNAME),con(FINDIVR.IDFNAME,' ',FINDIVR.IDLNAME,', ',FINDIVR.IDSUFFIXNAME)),pick(len(FINDIVR.IDSUFFIXNAME)>0,con(FINDIVR.IDPREFNAME,' ',FINDIVR.IDLNAME),con(FINDIVR.IDPREFNAME,' ',FINDIVR.IDLNAME,', 'FINDIVR.IDSUFFIXNAME)))

When you click **Rebuild**, your output will now contain names using the preferred name and last name suffixes as applicable.



Child and Parents.ahr

Child and Parents.ahr Report as of JUN 22 2001

NAME	FATHER	MOTHER
Robin Disney	Michael Disney	Susan Disney
Jesse Allen	William Allen	Lucille Allen
Penny Allen	William Allen	Lucille Allen
Camille Cook		
Thomas Cook		
Sara Cook		
Terri Hunter		
Scott Hunter		
Samantha Hunter		
Kathy Hunter		
Brian Delvecchio		
Stephanie Delvecchio		

If nothing is showing in the FATHER and/or MOTHER columns then you do not have that information in the individual records.

You may further customized or add information to this report as desired. Don't forget to save your work, especially if you like your output.