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Printing a Report

This is the chapter that has been years in the making. Not knowing enough myself about the GoldMine Report Writer, I have asked Andrea Dominguez, my go to reports person, to write this chapter for us. I must say that she has done an exemplary job.

This chapter is to discuss the navigation, alteration and creation of reports using the GoldMine Report Writer.

Several already created reports come with your copy of GoldMine Premium as delivered. If you only needed to print reports without altering dates or users, you can go to File | Print a Report.... All reports that are pre-made reside under the UserID of (public). To make alterations to reports, change parameters or create new reports select from the GoldMine menu:

Go To
Reports ►
Reports

From this dialog form, shown later in this chapter, reports can be cloned or altered by adding fields and/or parameters called dialogs. One thing these reports cannot do is be saved as an Excel spreadsheet or a PDF, although they can be printed to a PDF printer. GoldMine Reports can be saved as an .rtf, which can be opened in Word, or in the GoldMine Report Writer's proprietary format of .frc.

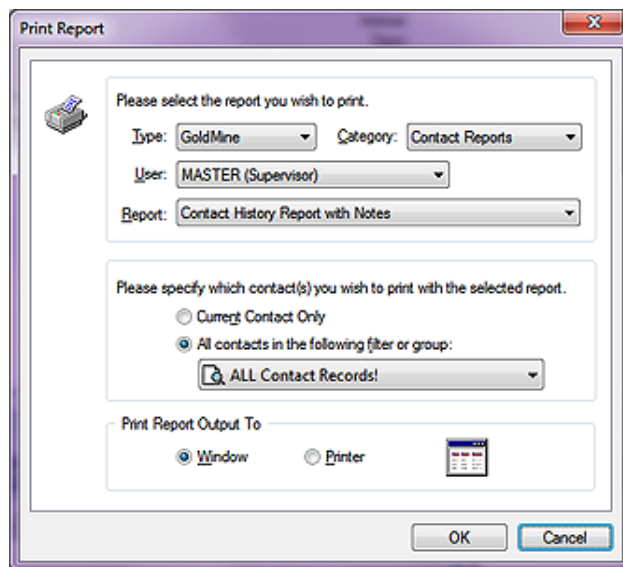


Figure 12-1

Let's first bring up the dialog form, displayed above in Figure 12-1, by selecting from the GoldMine menu:

File
Print a Report

In this dialog form we have three different frames, two untitled, and one titled. Let's begin by looking at the top most untitled frame in which there is a statement: **Please select the report you wish to print.** The first entity in there is **Type:**. If you have Crystal Reports installed, and those crystal files are in your GoldMine folder, then there will be two choices in this drop down, **GoldMine** or **Crystal** otherwise only GoldMine will be available for the **Type:** of report. This tells GoldMine what drivers should be loaded to run the report.

The **Category:** drop list is the next item of interest in this frame. There are 6 different categories from which to choose. These categories are available for

Tip

As a general Rule of Thumb, do not place Calendar based reports in the Contact record category, nor place Contact record listing reports in another category.

Tip

If you decide to customize one of the reports that come with GoldMine for your users, it is recommended that you **Clone** the reports under a **UserID** name instead of the user (**public**). This makes the customized reports easier to find and accessible by all.

Tip

Utilizing **Filters & Groups** for record selection will make the report run faster, and it is recommended to use the **Filters & Groups** externally rather than have the report do all of the filtering at runtime.

Tip

Make certain that you have defined your Printer prior to running any report that you intend to print.



Note

If you receive an error message while trying to send your report to the printer that states printer cannot exceed 59 characters, then change the name of the printer to which you are sending the print job. The path and/or name is too long, and GoldMine has a limit on reading paths.

Tip

For large reports without a **Notes** field, the performance will be better if you first print it to the window, then send it to the printer.

Tip

While troubleshooting why reports are not being sent to the printer from a Window view, try sending the report directly to the printer. There are some environments that sending directly to the printer works, when the Window view does not.

The Report Center

Note

The highlighted area, Figure 12-2, displays how many reports are contained within each category.

both GoldMine reports, and Crystal Reports. You should familiarize yourself with the various reports contained in each category prior to attempting to print a report.

- **Contact Reports** - these are reports that are based on the Contact record such as address lists. While calendar reports or history reports, in general, are not stored in this category, this category does contain some Pending and History reports.
- **Calendar Printouts** - this category includes graphical calendar reports as well as reports that will fit in Daytimer binders.
- **Service Reports** - this category is relatively new to GoldMine Premium. It includes a few default reports regarding Cases (Opened and Resolved), as well as a couple of detailed reports from the same category.
- **Analysis Reports** - this category contains Opportunity Manager reports as well as various Forecasted Sales Analysis reports.
- **Labels and Envelopes** - this is a self explanatory category, and contains various Avery Label reports, and Monarch Envelope reports.
- **Other Reports** - these reports are odds and ends reports in the GoldMine application such as the Filters Listing & Rolodex Reports.

As you change the category, the report selection changes accordingly.

All of the reports that come pre installed with GoldMine are located under the **User: (public)**.

Lastly, in this frame, is the **Report:** that you wish to have printed. Only those reports that belong to the specified **User:**, that are in the specified **Category:** will appear in this drop list.

The next untitled frame, as identified by the statement: **Please specify which contact(s) you wish to print with the selected report.**, is to tell the report which GoldMine records to include in the report.

- **Current Contact Only** - will run the report only against the information from the currently active Contact record.
- **All Contacts in the following filter or group:** - the default of which is **ALL Contact Records!**, however, this option will select the records based on any already created Filter or Group located under the current User Filter/Group menu or that of any User Filter/Group in the GoldMine system to which the logged in UserID has access rights.

As these are a radio button selection one may only select the one or the other, and not both.

In the final frame, **Print Report Output To**, you have a radio button selection option as well. You may either select **Window** or **Printer**. Output to Window will print the report to the screen as the output to Printer sends the report directly to the preselected printer (see sidebar Tip).

Finally, you may click upon the **OK** button to begin the report processing.

As mentioned before, all installed reports reside under the **UserID** of (**public**). All users have access to this user even under the strictest of security setups unless you remove complete access to the Report Center. Sometimes it gets confusing finding custom made reports in the sea of pre-made reports under the **UserID (public)** unless you have a very good naming scheme in place. Some scenarios of this nature would be like this, either create a new GoldMine **UserID** named **Reports** or save all the reports under the **UserID MASTER** while giving the other users access to these reports. All users would then be able to view the custom made reports easily, and use them as well.

Let's bring up the **Report Center** by selecting from the GoldMine menu:



You will notice, at the top of the reports menu, there is a drop down list for **User:**. When you login to GoldMine for the first time, the list item defaults to the user (**public**).

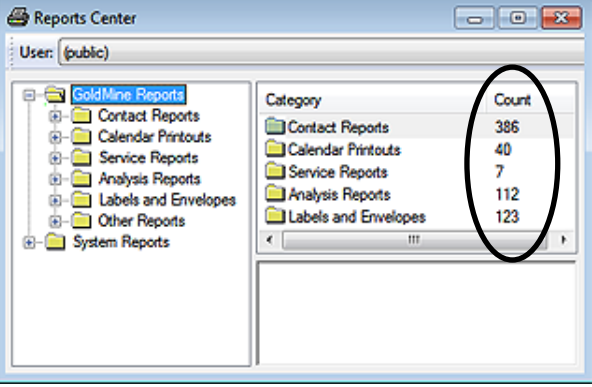


Figure 12-2

In the frame immediately below the **User:** drop down list in the tree there are 3 possible report type choices:

- GoldMine Reports
- Crystal Reports (Type only present if Crystal RunTime files are in the GoldMine root directory)
- System Reports

Under the GoldMine and Crystal sections, there are subsections called categories. These categories cannot be edited, nor can other categories be added. It is recommended to be mindful of where you are saving your cloned or newly created reports in regards to these categories. You should not place a Calendar report under the Contacts or Labels category.

Note

You may have noticed, Figure 12-3, that I have exposed the Report Center Toolbar. I have done this by dragging the highlighted handle of the Report Center Toolbar under the **User:** Toolbar.

Note

Highlighting a **Category** from the tree exposes a list of the reports contained within that category to the right. Highlighting a **Report** from the exposed list will cause an image of the report to display below the list items. This only holds true for the default GoldMine reports unless you create your own report images in the proper manner for the reports which you create.

Note

For the report image to display, the image must reside in the **Reports** folder under the **GoldMine** folder, and it must have the exact same name as the report with the **.jpg** extension.

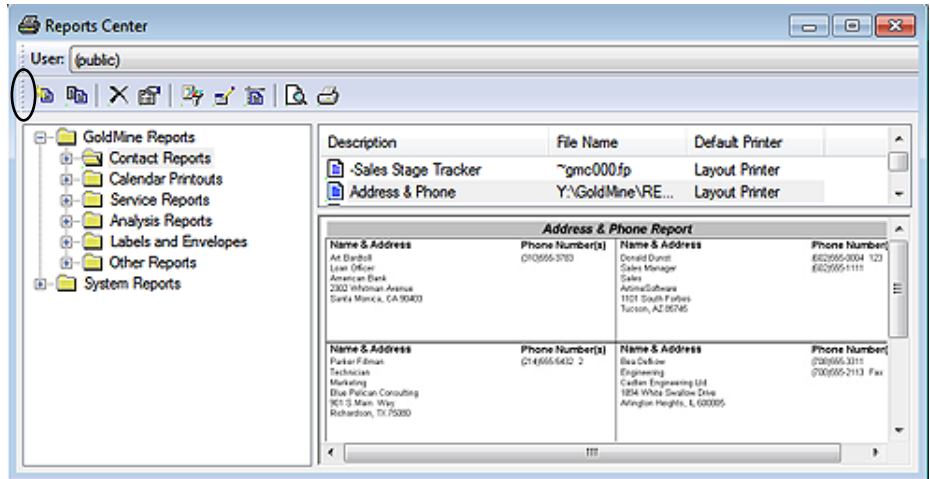


Figure 12-3

Let's start with running an existing report. Refer to Figure 12-4 below. Expand the subcategory branch called **Contact Reports** located under **GoldMine Reports** tree in the left column for the **(public)** UserID. You should see several preexisting reports in this column. By clicking once to highlight a report in the tree the right frame of the Report Center dialog form comes to life. You should also see a **jpeg** of the report in the bottom right frame as well as a **Description**, the **File Name**, and the **Default Printer** it is designed to run with in the top right frame. Layout printer means that the print driver that the report will use is that of the default printer selected in GoldMine at designed time. Selected printer is the printer the user chooses. This does make a difference at runtime. You might find that some things that run fine for you might be chopped off for another user. This is because of the various possible printer drivers called at runtime.

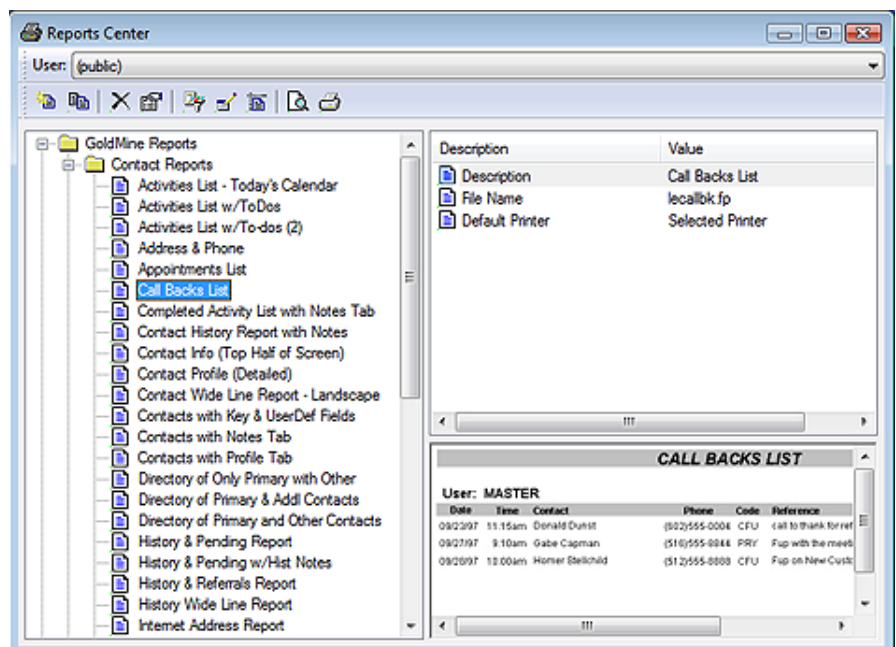


Figure 12-4

Existing Reports Contact Reports

Note

Remember, in GoldMine Premium, each default report has an associated example image of that report.

For the report image to display, the image must reside in the **Reports** folder under the **GoldMine** folder, and it must have the exact same name as the report with the **.jpg** extension.

When the report is highlighted, in the list of reports, the report example will be displayed in the lower right quadrant of the dialog form.

Your copy of GoldMine comes with pre-made reports. These reports are located under the UserID (**public**), and the report type of GoldMine. By right clicking on a report, and left clicking on **Properties...** you can find additional notes on how the report runs as well as for what it may be used.

Under the **Contact Reports** category branch, the following reports should be available;

| <u>Description</u> | <u>File Name</u> | <u>Report Summary</u> |
|------------------------------------|------------------|--|
| Activities List - Today's Calendar | abactvt.fp | Reads from System date, and returns only activities for run date. |
| Activities List w/Todos | abactvu.fp | Works with Options tab, and returns activities based on selection. |
| Activities List w/To-dos (2) | abactlst.fp | Works with Options tab, and returns activities based on selection. |
| Address & Phone | leaddrph.fp | Works with external filters, and gives summary in business card size area. |
| Completed Activity List w/Notes | lecmphst.fp | Displays completed activities by contact record as well as the Notes tab. Works best with current contact or filtered group - should not be used on all contact records unless database is very small. |
| Contact Details | contprof.fp | Displays a snapshot of complete record, Pending, History, Details. Works best with current contact. |
| Contact History Report w/Notes | lecomhst.fp | Displays Contact1 address info as well as completed activities, and the Notes entered on those activities. |
| Contact Info (Top Half of Screen) | smpcontp.fp | Displays Contact1 info as well as Summary tab, and User Defined fields. |
| Contact Wide Line Report-Landscape | contline.fp | Displays Address information in landscape format. One record per line. Works best for large filters. |
| Contacts with Details Tab | smppt.fp | Displays Address info, UserDef fields, Key fields, Summary tab, and Details tab. |
| Contacts w/Key & UserDef Fields | lekeyusr.fp | Displays Company, Primary Contact, UserDef fields, Key fields, and Notes. |
| Contacts w/Notes Tab | smpnt.fp | Similar to Contact Profile Detailed except only displays Contact1, Contact2, and Notes. |
| Directory of Only Primary w/Other | wwdir500.fp | Displays Primary Contact as well as Other Contacts. Will not display if nothing is entered under the Contacts tab. |
| Directory Prim & Addl Contacts | abpcoc.fp | Same graphical format as above listed report, list all records in external filter criteria. |
| Directory Prim & Other Contacts | wwdir.fp | Same basic graphical format, and properties as above listed report. Other Contacts display in bold. |
| History & Pending Report | smpH&pts.fp | Displays Address info, Key fields, User Defined fields, Pending & History activities. |
| History & Pending w/Hist Notes | abp&hn.fp | Displays same as above listed report as well as Notes entered in History activity. |
| History & Referrals Report | histref.fp | Displays Address, Key fields, User Defined fields, History activity - no Notes. Good for current Contact only or small filter. |
| History Wide Line Report | histline.fp | Landscape format, lists 1 history activity per line. Good for running against larger filters, date range set in Options tab. |
| Internet Address Report | Intadd.fp | E-mail Address list. Good for small filtered groups due to format. Not meant for current Contact. |
| Linked Documents | lelink.fp | Displays Linked Documents. Best used in filter or all Contact records. Not meant for current Contact only. |
| Message List | smpml2.fp | E-mail sent report. Not meant to use on current Contact only. Date range set in Options tab. |
| Next Actions List | smpnal2.fp | Displays Pending Next Actions. Date range, and User set in Options tab. |
| Organizational Tree | orgtree.fp | Lists all Relationship trees. MUST use all contact records at runtime. Will not work with filter or current Contact. |
| Other Contacts Listing | oclist.fp | Lists Additional Contacts. Not meant for current Contact only. |
| Pending Activity Report | lefutact.fp | Displays Pending activities specified in Options tab. |
| Pending Call List | lecallbk.fp | Returns calls in range selected in Options tab. Even though it says Call Backs, it means all calls. |

Calendar Printouts

Note

Remember, in GoldMine Premium, each default report has an associated example image of that report.

For the report image to display, the image must reside in the **Reports** folder under the **GoldMine** folder, and it must have the exact same name as the report with the **.jpg** extension.

When the report is highlighted, in the list of reports, the report example will be displayed in the lower right quadrant of the dialog form.

Note

If you wish to alter the dates that the report is looking at, you will not be able to reach the **Options** tab from the **Print a Report** menu. You will need to go to the **Report Center**, and open the **Options** tab.

WARNING

One should **never** consider modifying any of the default reports in any manner. One should always **Clone** the report, and then modify the **Clone**.

| | | |
|-----------------------------------|-------------|---|
| Pending Wide Line Report | smppwlr.fp | Landscape format. Displays Pending activities specified in Options tab. |
| Phone Book | fonelist.fp | Contact1 telephone list. Can use Sorts tab to set lookup or external filter or both. |
| Phone Book (Primary & Additional) | foneoth.fp | Phone list for both Primary and Additional Contacts. Can use Sorts tab, and external filters. |
| Phone Book Business Card Style | fonebus.fp | Lists Primary Contact record Phone, Address info in business card graphical format. |
| Phone1 & Fax Report-Landscape | le4fones.fp | Lists Company, Contact, Phone1 and Fax. |
| Potential Dupe Contact Report | smpdupch.fp | Not the most accurate of reports, looks for potential duplicate records. |
| Referral List | abreferl.fp | Displays Contact1 info for Referrals made; this record was referred to this record. |
| Referral Status Report | refstdtl.fp | Lists Contact1 info for Referrals as well as the status selected in Referral tab properties. |
| Today's Appointments | leapptls.fp | Returns appointments selected in Options tab. |
| To-Do Listing | smptd.fp | Lists To-Do's. MUST use all Contact records. Will not work with current Contact or filter. |

Under the **Calendar Printouts** category branch, the following reports are available:

| Description | File Name | Report Summary |
|------------------------------------|-------------|--|
| *Calendar Default Report | c1.fp | Lists Calendar Notes, not activities. |
| Activities Monthly | lmonth.fp | Displays Calendar in Month graphical format. |
| Daily - DayTimer (detailed) | caldv.fp | Displays by Day, Daytimer format Calendar with Contact details. Folio size only. |
| Daily - DayTimer (summary) | caldf.fp | Displays by Day, Daytimer Summary format. Folio size only. By default will insert current date into date range, but you can change that. |
| Daily Appointment List | c1fp000.fp | Displays Scheduled Appointments, Contact, Duration, Time, Date, Reference, and Notes. |
| Monthly - DayTimer | calmv.fp | Displays Calendar in Month graphical format. Folio size only, and runs current month but you can alter dates. |
| Weekly - Day Timer*Avery 41357 | calwl.fp | Prints 2 Daytime Desk size pages per 8 1/2 X 11 piece of paper. |
| Weekly - DayTimer (portrait) | calw000.fp | Prints Folio size Daytimer calendar in Week graphical format. Auto inserts current week, but dates can be altered. |
| Weekly Appointment List (portrait) | smpwalst.fp | Prints Folio size Daytimer in Week graphical format. Only displays Appointments. |

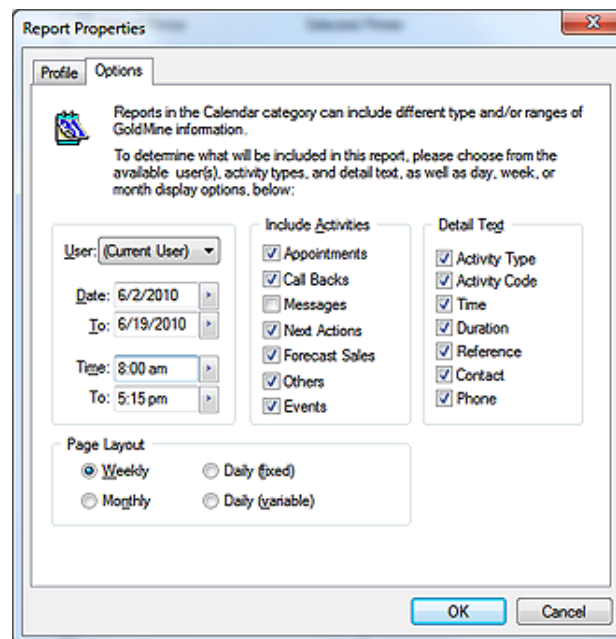


Figure 12-5

Why don't we take a look at the **Options** that I have been discussing. You can bring up Figure 12-5 in your copy of GoldMine Premium by right-clicking on any report within the **Report Center**, and selecting **Properties...** from the local menu. Next click on the **Options** tab in the dialog form. I might add that the **Options** tab displayed in Figure 12-5 is from a **Clone** of one of the **Weekly Day Timers**, which brings up a good point, never work on the original, always work on a Clone.

You will notice that there are four frames on this dialog form this time, one untitled, and three that are titled. The first frame, and also the untitled frame, is the first of our filtering sets. You may set the **User**: to filter the report for the **(Current User)**, the user that is logged into GoldMine, or

alternatively, for a specific user. For these particular report types, you cannot Filter against a User Group. **(Current User)** will display only the activities for the person currently running the report, and is typically the best choice. In the same frame, we next have a date range that can be applied as our Filter. There is the from **Date:**, and the **To:** date for the Filter range. Lastly, and still in this frame, we also have a time range that can be applied. There is the from **Time:**, as well as the **To:** time for the completion of the range.

The next Filter that we can apply is via the **Include Activities** frame. As the frame title indicates, you may Filter on the various **Cal.RecTypes** (refer to The Tables chapter) that are available simply by checking or unchecking the appropriate boxes. Those that are checked will be included in the report at runtime, while those that are unchecked, at runtime, will not be included.

Now it is your choice as to the information to include in these types of report, and you do so using the **Detail Text** frame. Again, you have checkbox options to toggle on or off. I won't reiterate the list here, however, you have 7 pieces of additional information that may be included in your output at runtime.

Lastly, on this dialog form, you have the **Page Layout**. Notice that there is no hot key for this frame. As a general rule, do not change the settings in this frame.

Service Reports

And under the **Service Reports** category branch, the following reports are available:

| <u>Description</u> | <u>File Name</u> | <u>Report Summary</u> |
|------------------------------------|-----------------------------|--|
| Assigned Cases by User | SRAssignedCases.fp | Prints Assigned Cases by the UserID, Start Date. |
| Resolved Cases by User | SRResolvedCases.fp | Prints Resolved Cases by the UserID, Start Date. |
| Resolved Cases by User per Mont | SRResolvedCasesPer Month.fp | Prints Resolved Cases by the UserID, Start Date with a further breakdown by Month. |
| Service Report - Pending & History | SRH&P.fp | Prints the Case Details as well as a listing of any Pending or Historical activities related to this Case. |
| Service Report w/Tasks | SRT.fp | Prints the Case Details as well as a listing of open Tasks remaining for this Case.. |

Analysis Reports

Under the **Analysis Reports** category branch, the following reports are available:

Note

Remember, in GoldMine Premium, each default report has an associated example image of that report.

*For the report image to display, the image must reside in the **Reports** folder under the **GoldMine** folder, and it must have the exact same name as the report with the **.jpg** extension.*

When the report is highlighted, in the list of reports, the report example will be displayed in the lower right quadrant of the dialog form.

Note

By program default, these reports insert a date range that includes anything that you'll ever do. To help the report performance, change the date range to only what is actually needed.

Note

*For reports that use a dialog for the date range, make sure your **Options** tab for that report has an end date that is very far into the future (by as much as 10 years or more).*

| <u>Description</u> | <u>File Name</u> | <u>Report Summary</u> |
|--|------------------|--|
| *Opportunity Code Report | abopidrp.fp | Prints Opportunities by the ID GoldMine assigns, UserID, Start date. |
| *Opportunity Report - Pending & History | aboph&P.fp | Prints full detail of opportunity. Pending items as well as History, Contact information. |
| *Opportunity Report w/Tasks | abopmgrp.fp | Prints Opportunity with Task details, Competitor, Influencers, and Contact information. |
| *Project Code Report | oppcdrpt.fp | Prints Projects by the ID GoldMine assigns, UserID, Start date. |
| *Project Report - Pending & History | abpjh&p.fp | Prints full detail of project. Pending items as well as History, Contact information. |
| *Project Report w/Tasks | abprjmgr.fp | Prints Project with Task details, Competitor, Influencers, and Contact information. |
| Completed Sales by User | compsale.fp | Prints Completed Sales for all Users. This can be changed to a single user in Sorts tab. |
| Completed Sales by User per Month | smpcsum.fp | Prints Completed Sales for Current User, and lists by Month Sale in which the sale was completed. |
| Completed Sales by User per Month (2) | conta003.fp | Prints Completed Sales for all Users, and lists by Month Sale in which the sale was completed. |
| Forecasted Sales Funnel by Cycle(detail) | smpfscd.fp | This report has a dialog for rate range, do not use the Options tab to set the date range. The Funnel is a display Summary by Probability. |
| Forecasted Sales by User | smpfsrcu.fp | Lists Forecasted Sales for Current User as well as a total for the Company, and Closing Ratio based on Probability. |
| Forecasted Sales by User (2) | smpfsrcu.fp | Lists Forecasted Sales for Current User. |
| Forecasted Sales-User per Month | smpfsum.fp | Prints Forecasted Sales for Current User, and lists by Month Sale according to sale date. |
| Forecasted Sales by User per Month (2) | smpfsum.fp | Prints Forecasted Sales for all Users, and lists by Month Sales according to sale date. |

| | | |
|--|-------------|--|
| Forecasted Sales Funnel/Month(Yearly) | smpsfms.fp | Prints Forecasted Sales. Uses dialog for date range. Also displays numeric information by Probability. |
| Forecasted Sales Funnel by User | smpsffl.fp | Same graphical display as Forecasted Sales Yearly, but by User. Also uses dialogs for date range. |
| Forecasted Sales Funnel-User (Detail) | smpsffl2.fp | This report has a dialog for date range, do not use Options tab to set the date range. It also lists for the Current User. The Funnel is a display summary by Probability. |
| Opportunity Manager: Opportunities | smpo&p.fp | Prints existing Opportunities. Can also use on the current selected record. |
| Opportunity Manager: Projects | smpo&p2.fp | Prints existing Projects. Can also use on the current selected record. |
| Opportunity Manager: Opportunities (2) | abopmgrp.fp | Prints existing Opportunities, but advances page after each one. |
| Opportunity Manager: Projects (2) | abopmgrp.fp | Prints existing Projects, but advances page after each one. |
| Phone Calls Log | conta001.fp | Prints on Current User. Lists Phone Calls completed as well as at end of report gives Statistics, Call made, Incoming, Outgoing, etc... |
| Phone Calls Statistics | conta002.fp | Gives Completed Phone Call Statistics, Duration, Incoming, Outgoing, etc... |
| Scheduled Activities Analysis | smpactan.fp | Gives Statistics to Pending activities by User. Total # Calls, Appointments, etc.... Can limit User in Sorts options. |

Since I have discussed the possible use of the sorting option, it would only be fair that we discuss this in more detail. I have selected the **Sort Orders** option for the **Scheduled Activities Analysis** report as my example, and this can be seen here in Figure 12-6.

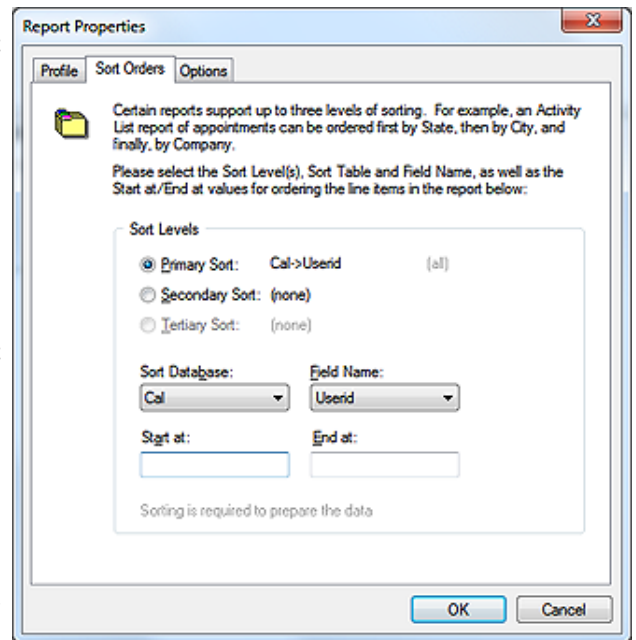


Figure 12-6

One of the first things that you may have noticed is that these are radio button options which would leave one to believe that this report could only have one sort order per report. Obviously, this could not be true, or very useful either. Again, the GoldMine developers have used a control, the radio button control, in a non conventional manner. In fact, there are three sort orders that you can control, the **Primary Sort**., **Secondary Sort**.: and the **Tertiary Sort**.

The **Primary Sort**: is always selected when this dialog form is viewed, and the information in the **Sort Database**., the **Field Name**., the **Start at**., and the **End at**: fields all pertain to the selected sort which, in this case, is the primary sort.

You may then select the **Secondary Sort**: option, and modify the information as is appropriate for your report.

Lastly, if you need it, you may then select the **Tertiary Sort**: option, and customize the information for the tertiary sort as is appropriate to your report.

I would like to reiterate once more, that making any changes, any where on the delivered GoldMine reports could be detrimental. You should always, repeat always, be modifying a cloned copy of the report in case any changes that you make in your testing crash the report or make it unusable. Trust me as I speak from having worked to recover many client reports that magically just stopped working.

Labels and Envelopes have pretty much had the same standard list since GoldMine 3.2 (perhaps even earlier). There are several different Avery label sizes, and standard size envelopes. Where the envelope size may have not altered since 1995, the labels have changed in size. They have been

Note

You could limit a report, that lists all Users, by changing the **Start at**: value which may have **AAA**, to the **UserID**, and then entering the same **UserID** in the **End at**: field.

So instead of it saying from **AAA** to **ZZZ**, it could now say from **ANDREA** to **ANDREAz**.

Labels & Envelopes

changed to accommodate deskjets, inkjets and laser printers. Since there are so many printers on the market, the labels tend to creep at runtime. Later in the chapter I will give detailed instructions on how to prevent the label creeping.

Other Reports

Under the **Other Reports** category branch, the following reports are available:

| Description | File Name | Report Summary |
|---------------------|-------------|--|
| Filters Listing | wfilter.fp | Lists filters for all UserIDs complete with the expression (in English as well as dBase). Can limit to single UserID in Sorts tab. |
| Lookup File Listing | lookup.fp | Lists the contents of a Lookup menu which is controlled in Sorts tab. |
| MailBox Report | smpmailb.fp | Displays E-mail sent and received. UserID and Date Range is controlled in Sorts tab. |
| Merge Form List | formlist.fp | Lists Merge Forms by UserID. |
| Scripts Report | lescript.fp | Displays Telemarketing Scripts |
| Users List | smpusit.fp | GoldMine User list. Also shows last Login/Logout time, Date, Full username. |

Customizing Reports

Figure 12-7a

Figure 12-7b

Sort Levels

Pay close attention to **Sort Levels** in the **Other Reports** category branch, for that matter, pay close attention to **Sort Levels** in all category branches. For example, the **Lookup Listing Report** has, in the default state, on the **Lookup.FieldName** with no sort range specified. In Figures 7a & 7b above I show you two possible sort ranges. The sort range in Figure 7a, when printed, will produce results while the sort range in Figure 7b will produce a blank page. The first sort range, Figure 12-7a, requires an extra character to see the entire list, and the report returns what is asked for as expected. The second sort range, Figure 12-7b, is missing that extra character, and did not return any results.

You can have up to three sorts for any given report. Sorting is a type filtering that is activated at runtime. It does not function until all of the records have been read into the view by the report. **Sort Levels** is also how the report will be graphically grouped. When creating your report sorting, it is best to approach it as you would with creating a complex GoldMine Filter. The Primary Sort is the largest body of data to be reviewed. If you are creating a report on a contact listing by City, then your Primary Sort would be City unless the database is using record curtaining, and there are far more records in the curtained group. I showed you a typical **Sort Orders** dialog form in Figures 7a & 7b.

In the report itself, however, you could add a 4th sort. By going into the properties of the fourth sort, and adding an additional filter. You can also add further filters to the properties of all the sorts such as particular RecTypes.

You can select Users, Date Ranges and Activity Types if you are running History or Pending reports. It is generally a good rule of thumb practice to limit user's exposure to this area. If the report needs to be flexible for items such as being able to change activity type or user, inserting runtime parameters, called **Dialogs**, is a much better approach.

Options

Note

If you are running a report such as **History & Pending Report** for a single GoldMine UserID, you will need to change the UserID from **(all)** to the GoldMine UserID in both History Data frame, and the Calendar Data frame.

And do not forget to set the **Date Range**. Typically if a report like this is going to be accessed by several users, it is recommended that you do not let the users modify the **Options** tab, and to use report dialogs instead.

The **Options** tab is divided into different sections depending on the category. If the report is something like the **History and Pending Report** located under the **Contact Reports** category branch, then both sections need to be altered prior to running the report. Where as, if the report were strictly a History report then you would only need to adjust the options in the **History Data** frame.

The **Options** dialog form shown in Figure 12-8, on the next page, appears for all report categories with the exception of the **Calendar Printouts**, and the **Service Reports** categories, however, in **Labels and Envelopes** category, the **Options** settings do not do much for the end result. See Figure 12-5, and the detailed explanation accompanying it, for the **Calendar Printouts** category **Options**.

If the report that you want to create is very similar to an existing report, it is far easier to clone that report, and to add your customizations instead of creating the report scratch. In my experience, His-

Cloning vrs Creating New Reports

WARNING

No where do I mention modifying a GoldMine pre-installed report. You should always **Clone** these reports as opposed to modifying them regardless of your reason.

tory reports and Forecast Analysis reports are usually easier to create from scratch rather than cloning a report that is slightly like the end result you are after. Opportunity reports are easier to do by cloning an existing report, and altering to suit your specific needs.

To clone a report first find the report you wish to clone, and then right-click on it. A local menu will appear, click on **Clone....** The **Report Properties** dialog form will then open. By program default, the cloned report will appear in the title box with **Copy of** inserted in front of it, see Figure 12-9.

You may change this name at any time. The owner should be you unless you are creating this report for another specific user. Alternatively, if you listened to my suggestion earlier and created a specific Reports UserID then you may want to select that UserID from the drop list. After the report is finished, you could change it to the **(public)** user for others to use although I still don't recommend that you intermingle your custom reports within the GoldMine default reports. The cloned report will then be inserted into the same category branch from which it was cloned, but under the specified UserID. Calendar reports under **(public)** go to Calendar reports under your UserID. It is best to keep them in their categories, and to not attempt to move them to other category branches.

Note

All that you need to do is enter a **Report Filename:** such as **Contact_List**. Click on the **OK** button, and the **Report Properties** dialog form will then create the file in the **Reports** folder under the GoldMine root folder.

A **Report Filename:** then needs to be created. You can make it anything that you wish it to be. Pay attention to the length, it does not need to match the title name, but it should be descriptive enough so that you will recognize it when in Windows Explorer. Also, do not use any punctuation in the **Report Filename:**, the **Report description:**, however, is a whole different story.

You could put notes in the **Notes:** section if you want to, but it is not necessary. Yet it could be helpful when reviewing the report in the future. Now you need to go to **Sort Orders**, and then to **Options** to establish the first set of parameters if they are to be different than those in the original report.

To create a new report, open the **Reports Center:**

Go To
 Reports ►
 Reports

Select your **User:**, if it is not already present there for you, and then, under the GoldMine Reports branch, find the category branch that your report will run under.

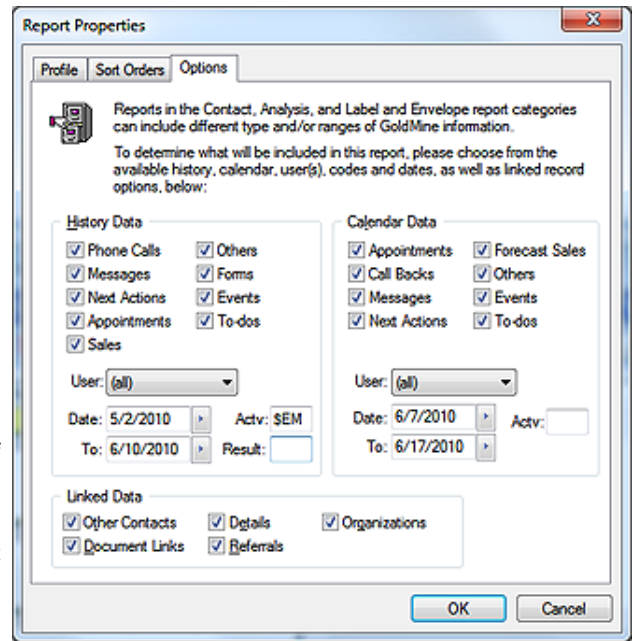


Figure 12-8

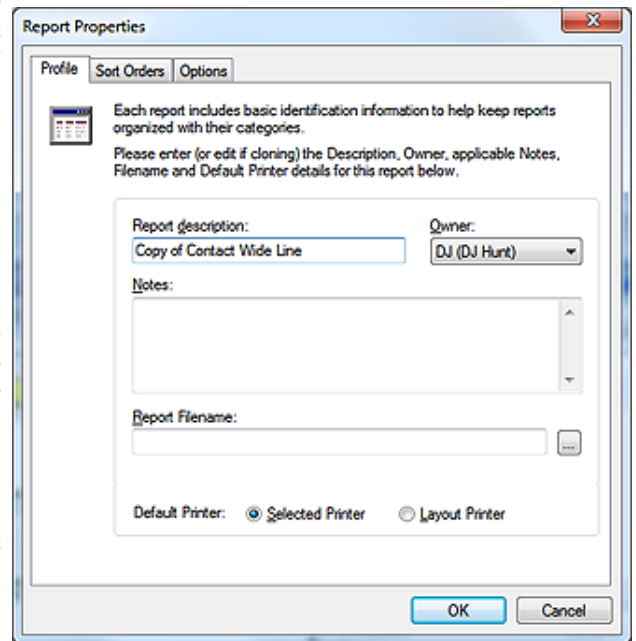


Figure 12-9

Contact Lists, History reports belong under **Contact Reports**
 Calendar Reports belong under **Calendar Reports**
 Forecasted Sales, Opportunity Reports belong under **Analysis Reports**

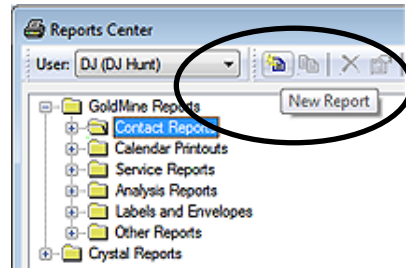


Figure 12-10

There is also the Service Reports, Labels and Envelopes, and the Other Reports branches that are available to you for this exercise. Keep in mind that what category, and what type of report you are running does matter. Different report macros are activated depending on category.

You can either right-click on the category that your new report will belong under, and select New from the local menu or click on the category to highlight it, and then push the **New Report** button in the report toolbar as shown here in Figure 12-10.

Filtering

Most people make an assumption that when one creates a report that all of the work must be accomplished by the report formulas. Truth be told, the more you can get filtering involved the faster your report will run. You can use GoldMine's own Filters and Groups for very large databases, but the report writer comes with several of its own filtering functions.

Report Filters - report filters are used when the report begins running. Dialogs may be inserted into this area as well to facilitate the correct filtering. This is how the dialog prompts appear at runtime. If you are creating a report for a particular activity type, inserting that condition into the report filters will make the report run faster.

Sort Tab - You can put a filter on the sorts, pun not intended, such as if a sort is by State, you can enter the State in both **Start at:** and the **End at:** fields. The report will return only the records that are in that range.

Tip
 To create a dialog field that is more than one word, use the underscore character. To create dialog field for start date, name it start_date.

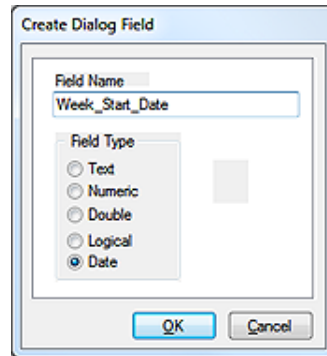


Figure 12-11

Dialog – A dialog is a prompt that is inserted into the report, and prompts the user to enter a value at runtime, such as a date range. To create a dialog, open the report layout, and place your cursor anywhere on the report. Right-click, and a local menu will appear. Select **Dialog Fields Table** ►, and then select **Create....** The **Create Dialog Field** dialog form will appear, Figure 12-11. Create a name for the parameter, and then select the type of parameter it is.

You see that I am creating a new dialog field to be utilized in a particular report. The **Field Name** will be the actual name of the report variable so it may not contain any spaces or special characters other than the underscore as shown here in Figure 12-11.

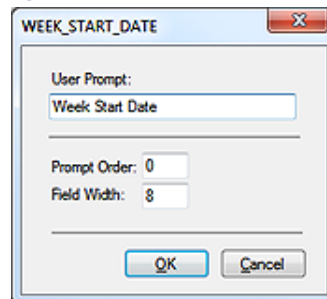


Figure 12-12

In the next frame, **Field Type**, you have the following possible types available:

- Text** - string values. It is good for a UserID or the name of a city for instance.
- Numeric** - numeric values only. To be used for fields that are truly numeric, and not numeric text.
- Double** - for float values.
- Logical** - returns True/False, Yes/No values.
- Date** - for values such as CreateOn or OnDate.

To make the input dialog look nicer at runtime, you can modify the dialog field to remove the existing underscores from the actual **User Prompt:**, and replace them with spaces. Refer to Figure 12-12. To do this, right-click in the body of the report, and go to:

Dialog Fields Table ►
 Modify... Ctrl+M

Now select the dialog that you wish to modify.

The name with the underscores will remain displayed in the titlebar. You can now give it a totally different name in the **User Prompt:** field which could include spaces and/or special characters.

Prompt Order: tells the report in which order this dialog input request will appear. If you are just inserting two dialogs for date range (**Start at & End at**) then you do not need to do anything with prompt order, the report filter will take care of it. Also the report should display prompts in the order of the report filter. There are instances when dialogs are required at different phases during runtime. If this is the case, then you should use **Prompt Order:** for all dialogs in your report.

The **Field Width:** is the standard width that is associated with the type of dialog that you had chosen. In most cases, leaving it alone is a good idea. However, you can change a date width. 8 is for MM/DD/YYYY, 6 would be for MM/DD/YY, etcetera.

Just creating the dialog is not enough. You must now tell the report to use it. Right-click on your report, and, from the local menu, select:

Report Settings ►
Filter... Ctrl+F7

Now you should see the **Report Selection Criteria** dialog form.

Report Filter Dialog examples:

Returning History records for a Date Range

| | |
|---|------|
| Create a dialog field for Start_Date | Date |
| Create a dialog field for End_Date | Date |
| Create a dialog field for UserID | Text |

Then insert the following into the Report Filter:

```
(ContHist->OnDate >= dlg->Start_Date .and. ContHist->OnDate <= dlg->End_Date)
```

This will return all records that where the ContHist.OnDate is within the date range as specified by the user running the report in the dialog fields.

Now let's add the dialog field for UserID into this report filter.

```
(ContHist->OnDate >= dlg->Start_Date .and. ContHist->OnDate <= dlg->End_Date) .and. ContHist->UserID = dlg->UserID
```

When the report starts to run this time, it will ask for date range first, and then the UserID for which to look. You could insert the UserID first, but you may see a performance difference at runtime unless it is a single user database.

Returning Specified Activities

This gets a little trickier because the database itself does not know what Appointment means, and unless you can get the end user to understand to type an A then you need to convert the values at runtime in the report filter using the if/then/else functionality.

First create a text dialog for Activity. Then, in this report filter, insert the following:

```
.if. dlg->Activity = [Appointment] .then. ContHist->sRecType = [A] .else.if. dlg->Activity = [Phone] .then. ContHist->sRecType = [C] .else. ContHist->sRecType = [D O T M]
```

Formulas and expressions can be used to return numerical data, such as the total number of activities. Expressions can be used to return boolean values, such as if a primary contact name is Joe then display on the report Joseph or True/False values. These are just two simple examples of what you can do with formulas and expressions, the list below will give a far better definition.

When to use a formula, and when to use an expression? The basic rule of thumb is; if you do not see the function listed in the builder then more than likely it will need to be an expression.

Creating Formulas

Insert ►
Expression Field F3

Open the formula builder (which is called **Calculation Field Name**, and shows up in the report as a CALC field), and the first thing that it will ask is to name your formula. You cannot have any spaces in the formula name similar to the dialog field name, but it is possible to make it look like it is more than one word by using the underscore character. So, instead of Count the Records, create the name as we have, for example, see Figure 12-13 titlebar, **COUNT_EM**.

Tip

If you can get your users to follow the structure of the **&CalActvName** and **&ContHistActvName** macros, then you can use that instead of writing out the translation.

Tip

If the field that you are creating your dialog on is a string field yet contains numeric text, do not use a numeric dialog unless you want to create a formula to convert the numeric text into a numeric value and then attach your dialog to that formula.

Formulas & Expressions

Note

If you are new to dbase expressions, it is a good idea to use the formula builder so you can get familiar with how the syntax is structured. It is generally not a good idea to have spaces in your formula unless you are telling it to look for a space, however, GoldMine will automatically remove any spaces that you may have added for readability. The space shown in the expression in Figure 12-13, for instance, will be removed when one clicks on the **OK** button.

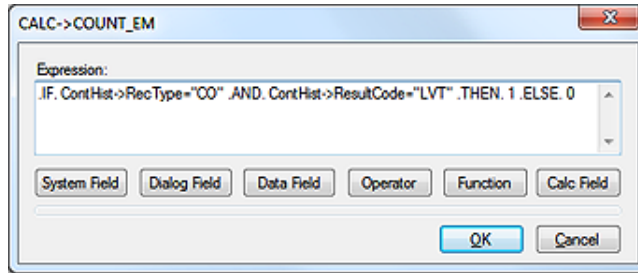


Figure 12-13

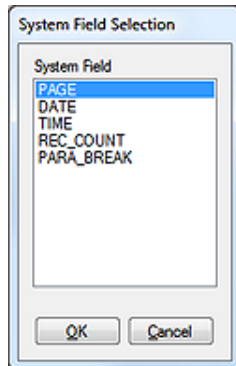


Figure 12-14

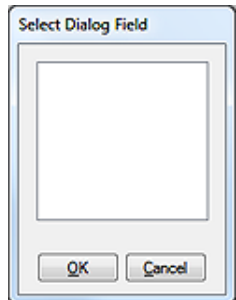


Figure 12-15

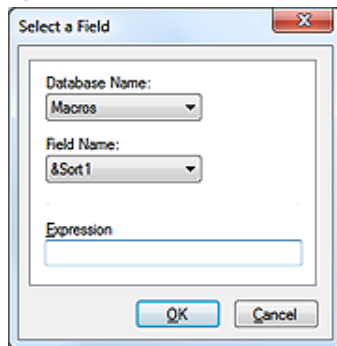


Figure 12-16

Address

&FullAddress - list entire address including the Country field

&Address1&2 - list Address lines 1, and 2

&CityStateZip - list City, State and Zipcode with the City State values separated via a comma

&Phones - lists all 3 phone fields

&User - the GoldMine UserID for the user running the report

&FullName - the GoldMine users full name who is running the report

&Licensee - lists the name to which GoldMine is licensed

&EmailAddress - lists the primary E-mail Address for the Contact record that is currently being reported upon

Push the **OK** button, and the formula builder opens, Figure 12-13. You could type your expression in the window or use the buttons below the expression window to assist you in your expression building.

System Field - Figure 12-14, is used to insert print **Date**, **Time**, or the **Page** number into your expression. You

could also insert a **Paragraph Break**, and a total **Record Count** for the criteria met on the report. Some of these items would, most likely, not be utilized in an expression as much as in the report itself.

Dialog Field - Figure 12-15 - any dialog (user entry prompt) that is created for this report will be listed in the **Select Dialog Field** dialog form for insertion into the expression that you are building for this report. You cannot create a dialog from this window, and your dialogs must have been created prior to bring up this dialog form for insertion of a dialog field into your expression.

Data Field - Figure 12-16 - database fields (refer to other sections of this book for field definitions), and macros that may be utilized in your expression. There is one extra option in the **Database Name**: drop list that is not a table alias, and it is called **Macros**. Macros are like shortcuts. Such as you can use **&FullAddress** in your report instead of manually inserting each field that would create the full address. Below are the macros that can be used when inserting a new report into the **Contacts** category or in your expression, however, even though I am showing you these through the expression builder dialog form, you would probably not utilize any of the macros in your expression.

&Sort1 - displays the sort1 label

&Sort2 - displays the sort2 label

&Sort3 - displays the sort3 label

&SourceFile - the database that is being used in the report

&CalActvName - list the activity type such as Appointment from the Cal table

&HistActvName - list the activity type such as Appointment from the ContHist Table

&Contact,Company - displays Contact, and the Company name in that order, separated by a comma

&Company,Contact - displays Company, and the Contact name in that order, separated by a comma

&Name&Address - lists the Contacts name along with the Address

&Title&Address - lists the Title value along with the Address

&Company&Address - lists the Company name along with the

When you are creating a **Pending Activity Report** that you have inserted into the **Calendar** category, the below macros could be used as well as the previously listed with the exception of sorts because it is no longer a tab option.

&Detail1 - displays information entered in the Options tab - such as UserID, Date Range, and Activities

&ActvName - lists the activity name

&Year - displays current year in a 4 digit format. For instance, if the field says 9/20/07, the report displays 2007

&Month - displays numeric value for the month. September would be displayed as 9

&CMonth - displays a text value for the month. 9/1/07 would display as September

&CMonthYr - displays the Month along with the 4 digit year. 9/1/07 would display as September 2007

&Date - displays current date, however, it could be used in date range expression

&DoW - displays the numeric day of week value for the date in question. Sunday being first day of the week would return a 0, whereas, Monday would display as a 1

&CDoW - displays the text day of week similar to DOW, 1 would display as Monday

&DayNo - works on calendar year. 9/20/2007 would display as 263

&WeekNo - Works on calendar year. 9/20/2007 would display as 38

&WDay1, &WDay3, &WDay4, &WDay7 - returns a numeric date value. WDAY1 = Monday, 3 = Wednesday, 4=Thursday, 7=Sunday. If the record that is being reviewed by the report falls on a Tuesday, Sept. 4th, and if you are using &WDay1, the report will display a 3. By using the same example, &WDay3 would display 5, &WDay4 would display 6.

&Hour, &Time, &Duration - will all display in a 12 hour format

&FrDate, &ToDate - From Date, and To end Date respectively

&LastMonth, &ThisMonth, &NextMonth - all displays Cal records from last month, this month or next month respectively

Operator - contains standard operators such as equal to (=), greater than (>) as well as more complex operators. Refer here to Figure 12-17.

.total-of. - sums of numeric field. You should never place a formula with this type of operator in a header of a report because the records need to be read first. Place it in the details section to get a running total or in a Sort Footer for a group total, or the Report Footer for a grand total.

\$ - The dollar sign operator tells the formula to look for a contained value. If you were looking for a value such as a city name that contains Red, then use the \$ operator.

.count-of. - This counts the number of records processed. If placed in a Sort Header/Footer, it will count actual records that the sort is set to.

.if., .then., .else. - These will probably be the most utilized operators, and they will be used together. If this happens, then do this or else do this.

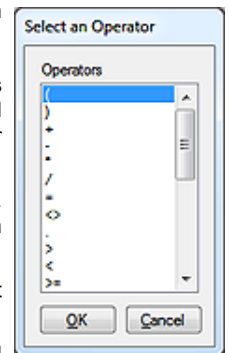


Figure 12-17

The following operators work best in a Footer in the report, Sort for a total of the group, and Report Footer for a grand total:

.ave-of. - provides average of numeric fields. First it sums up the field then divides it by the number of records that met the criteria.

.max-of. - looks at all values in the met criteria, and returns the highest value

.min-of. - looks at all values in the met criteria, and returns the lowest value

Function - Function tells the formula what should be done. You should refer to Figure 12-18 on the next page.

The following items cover functions, insert the field in place of (string), (num), (date). So if you wanted to convert Company name into uppercase in your report it would look like upper(Contact1->Company)

String - text field format

Num - numeric field format (not numeric text, for numeric text, you will also have to convert it to numerical value at runtime)

Note

If you are not sure of what type of field you are trying to create in your formula, then either ask your administrator or go to user defined fields window.

C = string
N = numeric
D = Date.

WARNING

Do not, under any circumstance, open the properties of a field from the **User Defined Fields** dialog form. The system will **delete** all of the data that was entered.

Note

It is good practice to use the function **upper()** in your report to convert fields into the same case when your data input is dirty or the database indexing is not quite 100%.

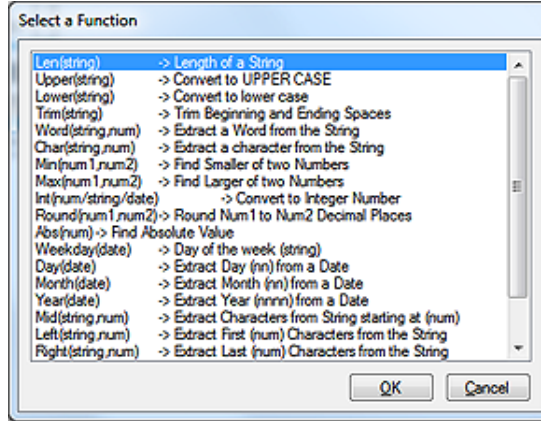


Figure 12-18

value of 2 numeric fields

Max(num1, num2) - finds the highest value of 2 numeric fields

Int(num/string/date) - converts field value into an integer number

Round (num1, num2) - rounds number to 2 decimal places

Abs(num) - returns the absolute value of a numeric value

Mid(string, num) - returns bytes beginning at the specified position. Example; mid("Andrea", 3) would return drea.

Left(string, num) - returns the left most bytes up to the specified number. Example; left("Andrea", 3) would return And.

Right(string, num) - returns the right most bytes up to the specified number. Example; right("Andrea", 3) would return dea.

Text(num, date) - converts the value into its string equivalent

Double(num/date/string) - converts the value into its decimal equivalent

Breaks(sum) - get the number of breaks on a sort

Date Based Functions

First thing you must do is to make sure that the machine holding GoldMine, and all workstations that will be running GoldMine are all set the same for windows long and short date formatting under the Regional Settings. That will eliminate many hours of troubleshooting when the report runs on one computer just fine, but does not run on the next computer.

WeekDay(date) - returns the day of week for the date displayed. Example; 8/1/2007 would be displayed as Wednesday on the report.

Day(date) - displays the day date for the date displayed. Example; 8/1/2007 would be displayed as 1

Month(date) - displays the month value for the date displayed. Example; 8/1/2007 will be displayed as 8.

Year(date) - displays the year value for the date displayed. Example; 8/1/2007 will be displayed as 2007

Date - date field format

Len(string) - measures length of value. Example; Andrea will be displayed as the numeric 6.

Upper(string) - converts the value into upper case.

Lower(string) - converts the value into lower case.

Trim(string) - removes extra spaces from the value.

Word(string, num) - extracts a word from a field

Char(string, num) - extracts a character from a field

Min(num1, num2) - finds the lower val-

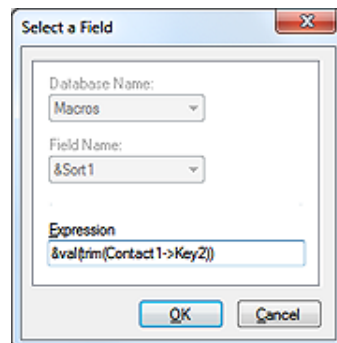


Figure 12-19

Directly Inserting Expressions

To insert a dBase expression directly into a report that a calculated field cannot handle, from the local menu:

Insert ►
Data Field F2

to bring up the dialog form shown here in Figure 12-19. Type in the expression, similar to that shown in the figure. You do not need to alter the drop down for **Database Name:** and **Field Name:** as they will be disabled anyway. The report writer will always display **Macros** and **&Sort1** respectively.

The expression, **&val(trim(Contact1->Key2))**, tells the report to remove null spaces (left and right), and then convert the

Note

A fully defined explanation/sample of each of these functions can be located in Appendix A of this book.

data from numeric text to a numeric value. This is useful for things such as displaying a fixed character length on your report. It is not necessary for basic math. Inserting a calc field that utilizes the **int()** function will be sufficient.

The following functions could be used as well, but these functions need to be inserted as an expression. You will not find them on the function menu selection:

- trim()** - removes spaces before and after the value entered in the field.
- alltrim()** - removes all spaces in the value entered.
- ltrim()** - removes spaces to the left of the value entered in the field.
- rtrim()** - removes spaces to the right of the value entered in the field.
- proper()** - converts the value into proper case Example; chicago is converted in Chicago (this is especially handy for reports where the data entered is not always clean data, and can be especially useful in a label or envelope reports) Caveat: proper([IBM]) would return lbm.
- date()** - system date in the set date format.
- substr()** - returns a defined portion of the string.
- ctod()** - converts a character string to a date.
- time()** - returns the system time in hh:mm:ss format.
- dtoc()** - converts date field into short year format. Example; 09/12/2007 will get converted to 09/12/07.
- dtos()** - converts date value to string. Example; 9/12/2007 will get converted into 20070912.
- reccount()** - counts number of records.
- stod()** - converts a string value into a date value. Example; 20070912 will get converted into 9/12/2007.
- val()** - converts numeric text to numeric value.
- str()** - converts a numeric value to a string value
- wdate(date, format)** formats a date in different varieties.

- 0** - month day, 2 digit year - Sep. 12, 07
- 1** - day, month date, 2 digit year - Wed, Sep 12, 07
- 3** - long date - Wednesday, Sep 12, 2007

day() - returns the number of days that have elapsed from the beginning of the year. Example; 9/12/2007 would have displayed 255.

age() - returns the age in years. Example; a date field with 9/2/1970 will be displayed as 37.

pad() - adds extra spaces, characters to what is being displayed. Example; pad("fred", 10, "A") will display as: AAAsfredAAA (fred is the value, 10 is the length you want it to be in total, A is the filler). Subsequently, you can use padl() for only adding to left of value, and padr() for adding to right of value.

iif() - iif technically means immediate if. It is typically used as a conditional expression in GoldMine, and should not be confused with the .if.. The iif() is used in expressions that are true/false. Example; iif(5 > 1, "it is bigger", "it is smaller") will return: it is bigger. .if. is used in formulas; if this happens .then. go do this. The .if. is great to use for arithmetic formulas.

Calc Field - lists the other formulas created in the report

Activities - There are two tables that hold **Activity** types, **RecType** and **sRecType**. **sRecType** is found in **ContHist** table, and it is 1 character in length, so all you need is the table shown below. For the **Cal** table, however, **sRecType** is not a choice. If you create a formula to look for Appointments in the **ContHist** table, you should not do **RecType = "A"**. It is possible for there to be more than one character in the entry. As you'll remember from the chapter on The Tables, the **ContHist.RecType** is 10 characters in length, and you need to create a formula to accommodate for the first character only unless you wanted your report to locate callbacks such as outgoing calls (**CO**) or incoming calls (**CI**). Our formula would appear as **left(ContHist->RecType, 1) = "A"**.

- A** - Appointment
- C** - Call
- T** - Todo
- N** - Next Action
- O** - Other Action
- L** - Merge form
- M** - Email sent

Note

day() gets the first of the year from the date entered in the field. So for our example, 2007 is the year it looks into.

Note

Something useful about using **padl()** in a field that is good practice here. The field was 10 characters in length. The value needed to be 9 characters. The following expression was used to get the values to be 9 characters in length:

```
padl(Contact2->uDunsMP,9,"0")
```

All that happened is the reverse, instead of adding zeros, it made what was in there disappear. There were extra spaces that were not easily visible so the expression needed to be altered:

```
padl(trim(Contact2->uDuns-MP),9,"0")
```

Always keep scenarios like these in mind when report writing. If it can happen anywhere else in the program, it can happen here as well.

A definitive description on the **ContHist.RecType/Cal.RecType** and the **ContHist.sRecType** fields may be found in the chapter called The Tables found earlier in this book.

Creating Conditional Formulas

Creating a conditional formula basically means if this happens, then do this action. This is the most commonly used formula structure when reporting. You can use the formula builder selection or just type in the formula. Just remember that operators such as if, or, and, not, and else require a period before and after. Examples; **.if.** , **.or.** , **.and.** , **.not.** , **.else.**, **.then.**. These are not case sensitive, however, it does make it easier to find things in your formula down the road if you are consistent.

Formula Examples:

Count Cities - This formula says, if the city is not empty, then give it the value of 1, else give it the value of 0.

```
.if. Contact1->City <> "" .then. 1 .else. 0
```

Count Cities - This formula is counting only records where the city is equal to **Chicago**. The city field itself is much longer than the name Chicago, so by surrounding it with the trim() function tells the report to remove any extra spaces at runtime (like when the user accidentally hits the space bar before typing in the name).

```
.if. trim(Contact1->City) = "Chicago" .then. 1 .else. 0
```

Count Records - To do a count of contact records created. The reason why you count by AccountNo is because one is created for each and every record, and they are all unique. There is no chance of duplication or nulls (at least there shouldn't be). Now you can also insert an expression instead of creating this type of formula. **Reccount()** will count all Contact1 records. If you have a SQL database, the formula may give you better speed performance.

```
.if. Contact1->AccountNo <> "" .then. 1 .else. 0
```

Counting Activities - To do a count of completed **Appointments** by **User**. The formula states that if the username is not empty, and the activity type is that of an Appointment then to give it a value of 1.

```
.if. trim(ContHist->UserID) <> "" .and. ContHist->sRecType = "A" .then. 1 .else. 0
```

Text Substitution - To conditionally list a label on a report. Formulas like these are often used to display names of **Sorts** or a field that has a lookup associated with it.

```
.if. Contact1->Key4 = "" .then. "Not Assigned" .else. Contact1->Key4)
```

Find Long E-mail Address - What this formula is stating is if the **ContSupRef** is empty and the **Contact** field is equal to **E-mail Address**, then to fill using the **ContSup.Notes** field information.

```
.if. ContSup->ContSupRef = "" .and. ContSup->Contact = "E-mail Address" .then. ContSup->Notes .else. ContSup->ContSupRef
```

Who Created the Detail Record - to find the user that entered the this particular **Detail** record.

```
left(ContSup->City, 8)
```

What Date was the Detail Record Created - to find the date the **Detail** was entered into the **Cont-Supp** table, meaning when it was created.

```
left(mid(ContSup->City, 13), 2) + "/" + left(mid(ContSup->City, 15), 2) + "/" + left(mid(ContSup->City, 11), 2)
```

When you create a calc expression, where you place it in your report will return different values. If your report, for example, had two sorts, **Sort1** being **State**, and **Sort2** being **City**, and your formula would be to count records. If you place the formula in the **Sort1** footer, then it will return the total number of records in the **State** being viewed. If you take that same formula and place it in the **Sort2** footer, then it will display the total number of records for the **City** being displayed.

Can you place the same formula in more than one area in your report? Yes - but it is recommended in simple reports only. If your report is going to do a lot of processing, it will run faster if you place another calc field as the grand total. If we use the example above, and the formula to count records is called **COUNT_EM** then that formula would be placed in the **Sort2** footer, and a new calc field would be made for the grand total for the **State**.

It would look like:

`.total-of. calc->Count_Em`

Date Month - &month(Contact2->uDate) - displays the numeric value for month entered in the field **uDate**.

Date Subtraction - <rim(str(int((ctod("12/31/2010") - Contact2->uStartDt) / 7))) - the first part of this expression converts the last day of the year to a numeric value, and then subtracts this value from the date entered into the field **uStartDt** and then divides it by **7**. This will return the remaining number of weeks left in the year based on the date entered.

Numeric Division - &val(Contact2->ucPerCen)/100 - converts numeric text contained in the **ucPerCen** field into a value, and then divides it by **100** to return a percentage value.

Numeric Multiplication - &Contact2->unMorEv * 12 - multiplies the numeric value entered into field **unMorEv**, and multiplies it by **12**.

Most people tend to overlook making reports look pretty, and most think that the GoldMine report writer is not meant to be pretty. By taking the extra few minutes to make the report graphically appealing gives the look of professional polish, and somehow it makes it look like the report is more reliable.

Graphics

Tip

You can shrink an image or enlarge an image only so much, as it will start losing quality. It is always good rule of thumb to save your image no more than 10% smaller than the actual size, and no more than 30% larger than the actual size.

Inserting Pictures or Logos - Save the image you wish to insert as a bitmap (**BMP**), and then open the report layout. If you do not have a graphics program, you can always use Microsoft Paint™ for the task (all the examples used for report writing were created in Microsoft Paint). Then push the **Picture** toolbar button when in the report layout, and the **Explorer** dialog form will open that will allow you to browse to your bitmap image.

After you have inserted the image into the report, you can also place a border around the image by right-clicking on it, and then, from the local menu, choosing:

Edit ▶
Outlines... **Ctrl+O**

You can create a drop shadow illusion for a field by checking only the bottom from the **Outlines** dialog form, and either the right or the left side. The **Line Color** button allows you to choose the line color.

Backgrounds - When you right click on a label or field, you can select from the local menu to:

Edit ▶
Background... **Ctrl+B**

This will allow you to change the background design/color for the label or field. Additionally, you could create a background color for each section by double-clicking on the section header, and then clicking on the **Background** button. There is no function to do the entire report, only sections and fields, hence, to do the entire report you would need to do all of the sections the same.

Tip

*Watch out for fonts that have serifs. Those are font tails like **Times New Roman**. Some video cards have a problem with the tails bleeding into each other. Also, when you choose a font, be sure it is something that all machines using this report will have installed, or you will run into problems at runtime. A report favorite is **Arial** or **Tahoma**. You also want to be careful of using narrow fonts, like **Arial Narrow**.*

Fonts - Double-click on the field or label, and selecting the **Font** button. You can change font type, size and color. **Underlining, Italic & Bold** can be set in these properties as well.

Inserting Lines and Boxes - To insert a line in your report, right-click, and select from the local menu:

Line ▶
Line **Ctrl+F9**

Alternatively, and probably easier, would be to select **Line** from the **Toolbar**. There is no official function to create a box when inserting your line, but, after inserting the line, you could then double-click on the line to change its characteristics. A dialog form appears, Figure 12-20, and you can change the line property from a **Horizontal Line** to a **Vertical Line**, a **Diagonal Line** or even a **Back Diagonal Line**. As well, from the **Line Style** frame, you could choose the style for this line. You will notice that there are also buttons that will allow you to modify

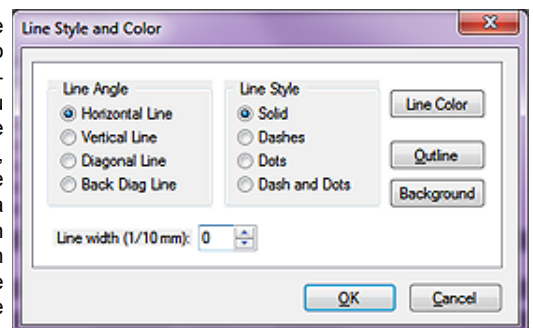


Figure 12-20

Tip

You should not use more than 2 different font patterns, and you should never use more than 2 colors (white doesn't count as a color). The more fonts and colors used, the more difficult it is to read the report. You want it to look pretty, not garish.

the **Line Color**, **Outline**, and the **Background** just as was mentioned previously for the fonts, and backgrounds.

You could also create an outline for any data or formula field in your report. By right clicking on the field, and, from the local menu, selecting:

Edit ►
Outlines... Ctrl+O

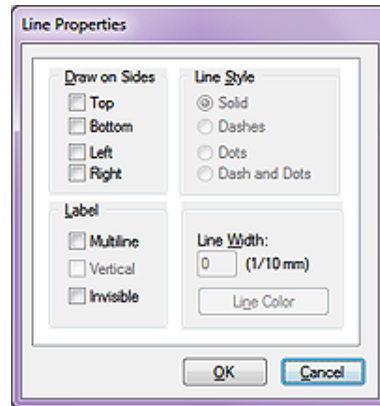


Figure 12-21

...the dialog form, shown here in Figure 12-21, will be displayed. You'll notice immediately that this dialog form has more options available for the **Line Properties** than that which you saw in Figure 12-20, previous page, on the **Line Style and Color** dialog form.

The **Draw on Sides** frame is for the **Outline** itself, and, as before, let's you select the sides upon which you wish the line displayed. Checking all four will place a box entirely around the entity.

The **Line Style** frame is a radio button selection that will define the style of the line to be used. The default will always be **● Solid**.

The **Label** frame allows you to manipulate the label, and this is a checkbox selection meaning that all are selectable.

Although why anyone would want a label, and then select to have it **Invisible** is beyond me. All three choices in the **Label** frame are only enabled if you right-click on a label. Each option in this frame is self descriptive.

Lastly, in the unlabeled frame, you may modify the **Line Width** in **(1/10mm)** increments. As well, you could also change the **Line Color** at this point by clicking upon the button or utilizing your hot key, **Ctrl+n**.

Overview: In this report we need to create a **Contact** listing that can be used by anyone that wishes to see the contacts in any **Category**. This report needs to print the records in the various categories by **City**. Since more than one category can be in the same city, the report will need to sort accordingly. The database has **Contact1.Key1** as the field where the category is identified in this database. We will be basing the category on the **Contact1.Key1** field value for this report.

Step 1: Open the **Reports Center**. Make certain that your name appears in the **Users:** field, if not change the value so that you are the user of record for this report, and then choose (highlight) the **Contact Reports** category.

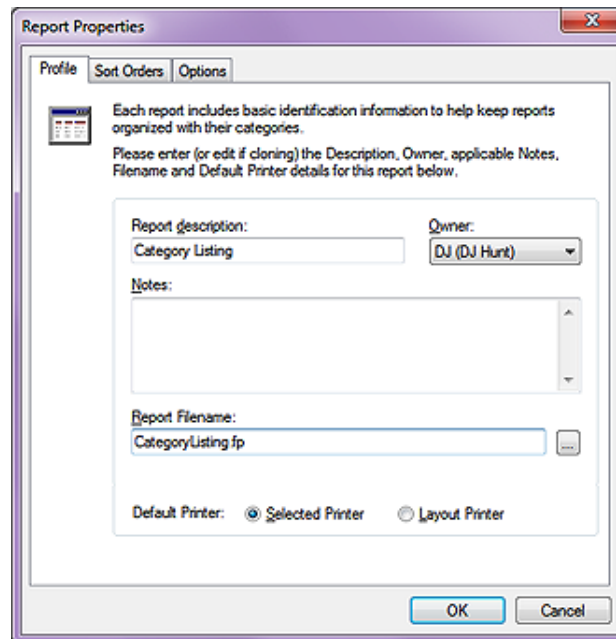


Figure 12-22

Step 2: Select the **New Report** button from the **Report Center Toolbar**, and the dialog form shown here in Figure 12-22 is brought up, and ready for your completion. Give your report a descriptive name in the **Report description:** field. Remember to make this a meaningful description that you will be able to understand its meaning if you don't revisit this report for another year. Then fill in the **Report Filename:** field. I ask you to do this so that your report file name will have some meaning as opposed to the indelible names that are auto assigned by GoldMine Premium, ~GM1008.fp, should you forget to enter anything into this field. For this report I have chosen **Category-Listing.fp**. The report file name must end in **.fp**.

You may also have noticed that I

Report Example Contact List Report

Note

Even though the **Sort Database**: drop list may appear to be enabled, do not be confused as it is not really enabled. You will not be able to enter a **Field Name**: unless you first pick a sort database from the drop list even if it is the same default **Contact1** table that already appears to be selected.

have accepted the **Default Printer**: © **Selected Printer**. Click on the **OK** button to create this report. Next highlight the **Category Listing** report, and right-click on the report. From the local menu select **Options...**, and then click on the **Sort Orders** tab.

Step 3: For the **Primary Sort** select or reselect the **Contact1** table, and then, in this case, the **Category** field (**Contact1.Key1**). Then for the **Secondary Sort** select the **Contact1** table again, and this time select the **City** field. Click on the **OK** button, and now open the report in layout mode by clicking on the **Edit Report Layout** icon in the **Report Center Toolbar**.

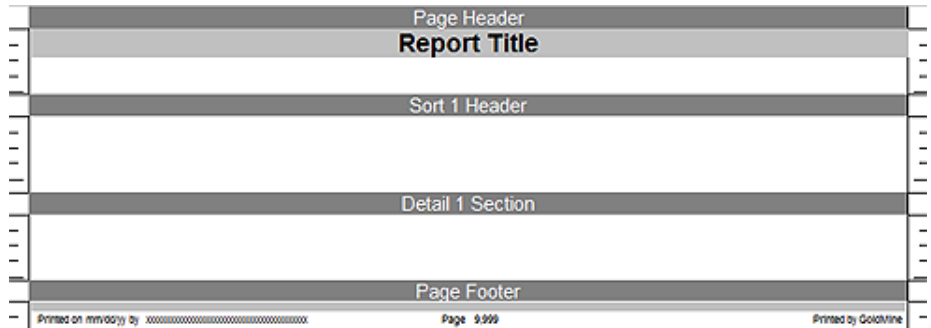


Figure 12-23

Step 4: The report should have **Page Header**, **Sort 1 Header**, **Detail 1 Section**, and a **Page Footer** already present as shown here in Figure 12-23. Let's add a section - **Sort 1 Footer**. Our list does not need to have a break in the section for each city so inserting the **Sort 2 Header** will not be necessary for this report.

Note

Remember that we cannot have any spaces in our dialog **Field Name** when we create it, so we use the underscore key. Refer to Figure 12-24a.

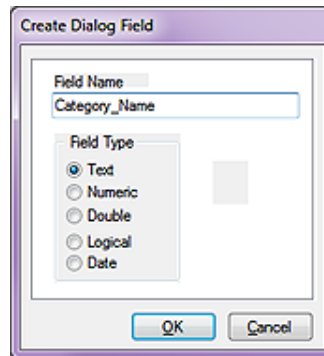


Figure 12-24a

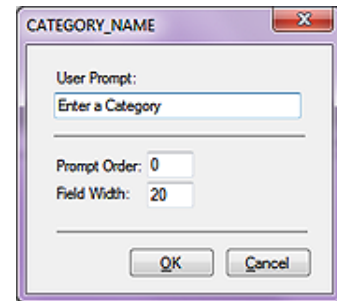


Figure 12-24b

Step 5: Now we will create a new dialog field (**Ctrl-R**), Figure 12-24a. We will give it a field name that the end user will understand, but we will also edit the field characteristics (**Ctrl-M**) to give this dialog field a more user friendly **User Prompt**:, Figure 12-24b.

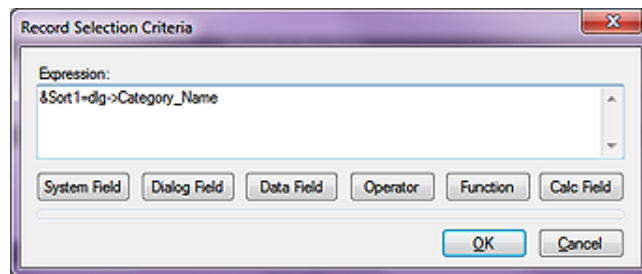


Figure 12-25

Step 6: Now let's create the general report filter (Filter button from the **Category Listing** layout Toolbar or **Ctrl-F7**). In Figure 12-25, notice the **Expression**: that I have entered. If you are following along, please enter this same expression.

Step 7: Insert the fields, and the field labels that we want to display, Figure 12-26 on the next page. You will notice that the page header has the **PAGE_HEADER** expression inserted. This particular expression that I utilized is:

"Category Selected: "+trim(Contact1->Key1)

You could also insert the **Sort1** label here as well, and you would have achieved a similar result. Since the field labels do not need to be printed for every entry, they were inserted in the **Sort 1 Head-**

er frame. If the report were multiple pages, and this needed to be on all pages, then insert these field labels into the **Page Header** frame or you could select the **Sort 1 Header** property to **Reprint titles on every page**. Remove the background, and insert a colored box for the logo background.

Step 8: We are now going to add the formula to count records to put in the **Sort 1 Footer**.

```
.if. Contact1->AccountNo > "" .then. 1 .else. 0.
```

Now insert the formula into the **Sort 1 Footer**, and right click on it. Select **Edit | Properties** from the local menu. This is where we can tell the field what type of summary we would like for it to do. 9 times out of 10, the **Total** summary is the proper setting, but it can never hurt to check, and, of course, the **Total** is what we desire for this particular report.

Step 9: Now to make it look pretty. First the **Page Header** was changed to a solid color background. Next the logo in bitmap format was inserted into the **Page Header**. The **Page Header** label was changed from **Category Selected: xxxxxxxx**, and the color and background was changed. Double-click on the **Detail 1 Section**, and select **Outlines**. Check the Top outline box, and change line color and thickness as is appropriate to your designing eyes. Alternatively, as DJ has done in Figure 12-26, insert the report Line. Our completed layout appear below;

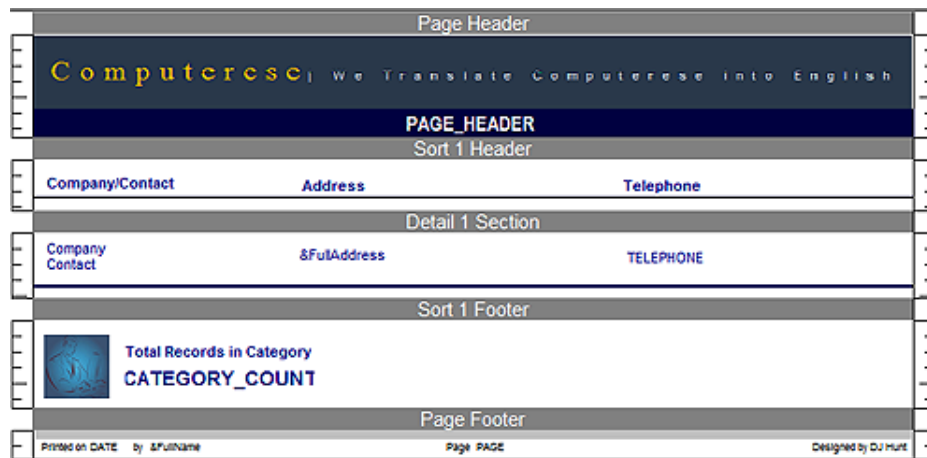


Figure 12-26

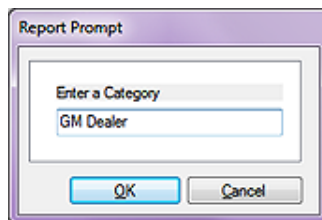


Figure 12-27

Step 10: Save the report as we are now ready to run it. Go to **Print a Report**, and change to your username (if not already selected), and double-click on your report. When the report runs, the first thing it asks for is the dialog information as shown here in Figure 12-27.

Step 11: The resulting report is shown to you in Figure 12-28 on the next page. It was way too big for this page.

Step 12: Some of the records do not have all of the phone numbers entered. This is common of most end users. You can leave them with the empty spaces or you can create a formula to point out that the phone number is missing. To do this, open the report layout, and remove the Phone1 field.

Step 13: Next create a formula:

```
.if. Contact1->Phone1 = "" .then. "Need To Fill In" .else. Contact1->Phone1
```

This tells the report if there is nothing already entered in the **Phone1** field then print on the report **Need To Fill In**.

Step 14: There are two things left to do. The first is to do a screen shot of your finished report. Save it as a JPG, and name it the same name as your report filename. Since this report file name is **CategoryListing.fp**, our screenshot file name would be **CategoryListing.jpg**. Save the jpg in the reports folder in GoldMine, and then go into the properties of your report. Now change the owner to **(public)**. It is a good idea to also make a copy of your report for backup purposes. By creating the JPG, you make a preview available to users in the customize reports menu.

Note
Although Andrea doesn't state this, when I inserted the **&FullAddress** macro into my report, I did have to change some of the properties so that the resulting display matched hers.
Double-click on the **&FullAddress** macro field to bring up the properties dialog form, and make certain that **Wrap Text**, and **Variable Number of Lines** is checked.

Note
I have to admit that my GoldMine is not configured the same as Andreas GoldMine as I use the Key1 field for Contact Type, whereas Andrea uses the Key1 for the Salespersons name. Hence, even though this dialog is asking me to Enter Sales Name, I was forced to enter Prospect to be able to show you the resulting report.

Note
I, and this is DJ speaking, always suggest moving the GoldMine default reports to the **MASTER UserID** from the **(public) UserID**. Put any shared reports under the **(public) UserID**.

| Computerese We Translate Computerese Into English | | |
|---|--|---------------------------|
| Category Selected: Family/Friend | | |
| Company/Contact | Address | Telephone |
| Don Christoforo | 78 Sylvan Avenue Leominster, MA 01453 USA | Need to Enter in GoldMine |
| Bob & Connie DeLorme | 614 River Road New Bern, NC 28562-7462 USA | (252)833-1558 |
| Aletta Chamberland | 65 Sunset Avenue Plainville, CT 06084 USA | (860)747-3523 |
| Monique Chamberland | 23 Hart Place Unit 7 Plainville, CT 06002 USA | Need to Enter in GoldMine |
| Elizabeth Sweeney | 56 S Randolph Avenue Poughkeepsie, NY 12601 USA | Need to Enter in GoldMine |
| Bert Sweeney | 151 Sandalwood Lane Rhinebeck, NY 12572 USA | Need to Enter in GoldMine |
| Kelly Desgroselliers | 596 North Central Street Winchendon, MA 01475-1282 USA | Need to Enter in GoldMine |
| Eric Desgroselliers | 596 North Central Street Winchendon, MA 01475-1282 USA | Need to Enter in GoldMine |
| Corey Desgroselliers | 596 North Central Street Winchendon, MA 01475-1282 USA | Need to Enter in GoldMine |
|  Total Records in Category | | 80 |
| # 11/10/05 10:00 AM Page 6 Category: Family/Friend | | |

Figure 12-28

