Intermediate Excel

SESSION HANDOUT

Applied Client Network
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Prepared for Applied Client Network

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Target Audience:

X	Accounting		Account Executive
	Non-Insurance Accounting	X	Customer Service Representative
	Administrative		New Producer
X	Principal		Experienced Producer
X	General	X	IT
	Human Resources		Other: (describe)

Seminar Type: Microsoft Products, Reports

Seminar Level: **Intermediate:** An Intermediate level class takes the concepts originated from a basic level course, and adds more layers or parallel concepts. For functional courses, these classes will require the participant or attendee to have some basis to work from as they are learning new facets of the agency management system or software program

Class Description: This HANDS-ON class will expand your knowledge of Excel tools and how they can be used to manipulate data exported from your management system. Don't just watch, do it yourself! Bring your laptop loaded with Excel and use the sample Excel workbook provided to practice the skills learned during the class. Become a Report Rock Star!

- **Learning Outcomes:** Expand your knowledge of Excel tools and how they can be used to get the information you want.
- Master powerful Excel tools and Functions to make reporting easier, like =Right, =Left, =Date, Concatenate, Replace, Text to Columns, Vlookup and Macros
- Be the report "Rockstar" in your agency! Show the boss just how fast and easy it is to analyze data using Excel.

Assumptions: This seminar is based on the following
TAM Version 11.X
Microsoft ® Word Version 2007

Table of Contents

Overview
This class will focus on some of the Excel tools that make formatting and analyzing data from Applied TAM easier. When Book of Business, Production or Activity reports are exported from Applied TAM, some data can be lost or formatted differently than expected. We'll start out by learning some of the handy tools that are useful when manipulating TAM data, then move on to more complex functions like vlookup and macros.

Filter data

This is truly one of the handiest features in Excel. Ffilter your spreadsheet so that certain data shows or doesn't show. It makes auditing your data a breeze.
If you run multiple reports that are basically the same, but with slightly different criteria, filters may be just what you are looking for. Run just one report that includes all the criteria you want, and then filter the data in Excel. You can copy and paste filtered data to another spreadsheet without taking any of the other data as when working with subtotals.

Filters are super easy to use. Simply click in a cell on your worksheet, then click on ***Data*** – ***Filter***. 

This puts little dropdown arrows next to your column headers. If you click on one of those arrows, you'll see a number of choices including ***(A-Z), (Z-A), (Filters...)***, and then an alphabetized listing of everything entered in that column, and at the bottom of the list you may see the words Blanks (if there are any blank cells in the column).

Click on one of the filters, or select multiple filters to analyze your data quickly.

One huge advantage of filtering over subtotaling, is the ability to copy and paste the filtered data into a new worksheet or workbook without having to use the Visible Cells only tool.

Examples: Turn on Filter on Sheet "Search-Policies Current-Active"

- **Filter for Blank Policy Numbers**
- **Filter for Zero Premium billing screens**
- **Filter for Zero Commission Amounts**
- **Filter for missing Producer Codes**
- **Filter for Producer CJH for Company CHB**
- **Copy and Paste the results of each filter to a new worksheet.**
- **Name each worksheet accordingly.**

WARNING: The AutoFilter list may not display all the unique visible items in a column as expected, if there are more than 10,000 unique items in the list. This is a limitation in Excel 2007.

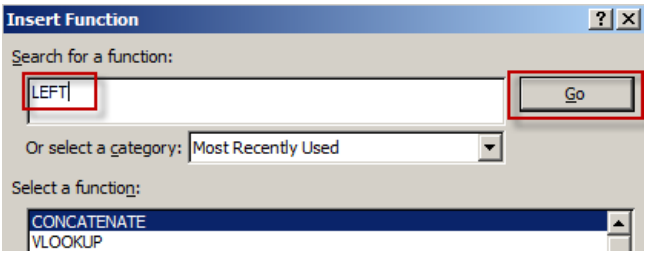
Left Function (ie, just the Client Code)

Problem: My spreadsheet only contains the Policy Index, but I want to be able to subtotal based on the Client Code, so I need a column with just the Client Code.

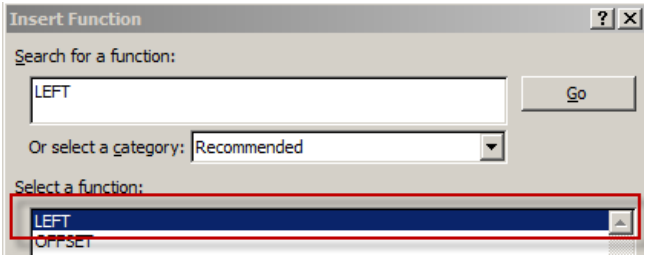
Solution: Use the ***Left Function*** to copy only the first 7 characters of the Policy Index into a new Column.

- ***Insert*** a blank column in the worksheet.
- Add a Title to this new column – Client Code
- Place your cursor in the cell below the "Client Code" Header.
- Now look to the left of the ***Formula Bar***. Click on the ***Insert Function*** icon

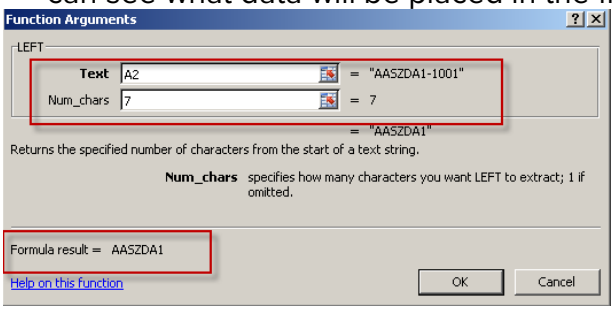
- We want to use the function called ***Left***. If you don't see it in the list, type the word **LEFT** in the "***Search for a function***:" box. Click **Go**.



- You can now select **LEFT** in the "***Select a function***": box. Click **OK**.



- Now you'll see a Function Arguments box. Place your cursor in the ***Text Field***, and then ***click*** on the cell with the Policy Index data.
- Now click in the ***Num_chars*** field. Enter ***7*** (because we want to see the seven characters on the left side of the selected cell). Look at the ***Formula Result.*** You can see what data will be placed in the field when you click ***OK (the Client Code)***.



- Click ***OK***

- Click in the new cell, and move your cursor so it's in the lower right hand corner of the cell. The cursor will change to a *+* sign. Now ***Double Click***. This will ***AutoFill*** all the cells below with the same formula.
- Next, we want to convert our formulas in this column to just data. Highlight the column by clicking on the Column Label (B, for example).
- Now, right click, ***Copy***
- Then, right click, ***Paste – Special Values*** – Now the data is the 7 digit TAM code, and not just a formula.

Example: Insert a column to the right of the Pol_idx, and use the Left Function to copy the Left 7 characters of the Pol_idx into the new column. Name the new column "Client Code"

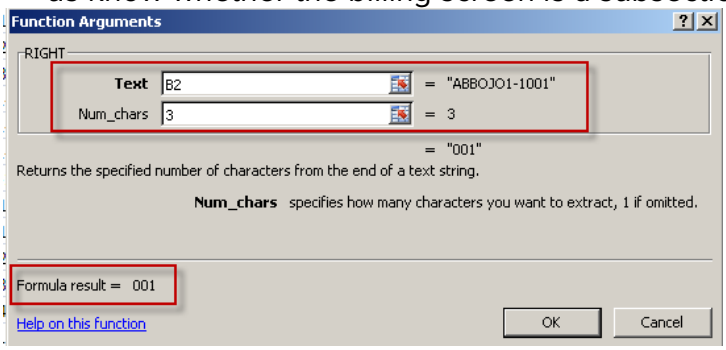
Right Function (ie, just the Policy Sub-Sections)

Problem: My spreadsheet contains all of my billing screens, but I only want to see the Policy Indexes that end in "001".

Solution: Use the Right Function to copy only the last 3 characters of the Policy Index into a new column. Then use Excel Filters to see the Policy Indexes that end in "001".

- ***Insert*** a blank column in the worksheet.
- Add a Header to this new column – **Subsection**
- Place your cursor in the cell below the "Subsection" Header.
- Now look to the left of the ***Formula Bar***. Click on the ***Insert Function*** icon

- We want to use the function called ***Right.*** If you don't see it in the list, type the word **RIGHT** in the "***Search for a function***:" box. Click **Go**.
- You can now select **RIGHT** in the "***Select a function***": box. Click **OK**.
- Now you'll see a Function Arguments box. Place your cursor in the ***Text Field***, and then click on the cell with the Policy Index data.
- Then click in the ***Num_chars*** field. Enter ***3.*** Look at the ***Formula Result.*** You can see what data will be placed in the field when you click ***OK***. We entered 3 because we want the last 3 characters of the Policy Index field, which should let us know whether the billing screen is a subsection.



- Click ***OK***
- Click in the new cell, and move your cursor so it's in the lower right hand corner of the cell. The cursor will change to a *+* sign. Now ***Double Click***. This will AutoFill all the cells below with the same formula.
- Next, we want to convert our formulas in this column to just data. Highlight the column by clicking on the Column Label (B, for example).
- Now, right click, ***Copy***
- Then, right click, ***Paste – Special Values*** – Now the data is the 3 digit Policy Slot, and not just a formula.
- Turn on Excel Filters, and locate the policy indexes that end in "001".

Example: Insert a column to the right of "Client Code", and use the Right Function to copy the Right 3 characters of the Pol_idx into the new column. Name the new column "Subsection". Turn on Excel filters and locate the policy indexes that end in "001".

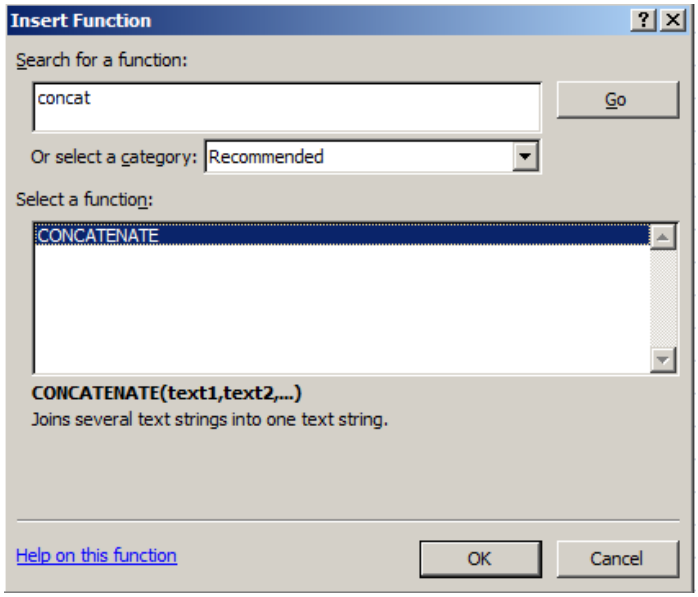
Concatenate (Combine Data)

Problem: In my agency, we add a new policy detail screen when a policy is rewritten, so if I am trying to compare one period to another using the TAM policy index, the data is inaccurate.

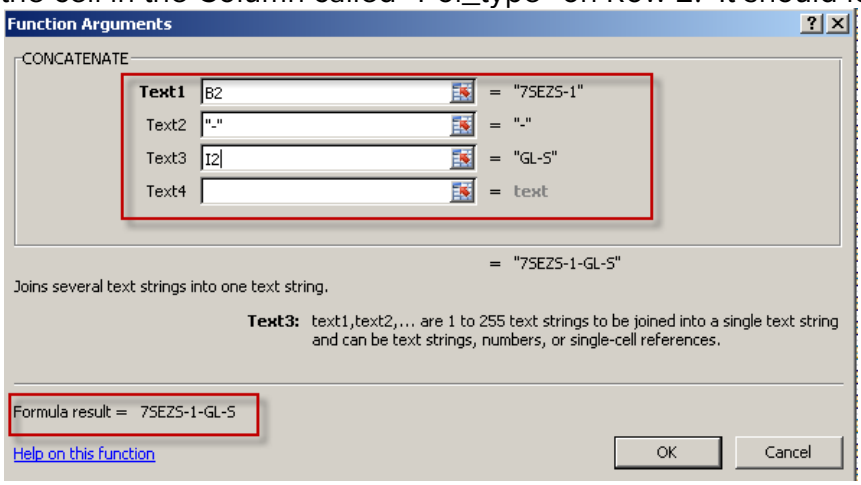
Solution: Another option would be to compare one period to another using the TAM Client Code and the Policy Type. Combine the two fields using the **Concatenate Function.**

To **Concatenate**:

1. ***Insert*** a Column in your worksheet.
2. Add a Header to this new column – **Client - Policy Type**
3. Place your cursor in cell below the Header created in Step 2).
4. Click the Insert Function button  , and select ***Concatenate*** from the list of functions (if you can see it), or type the word Concatenate in the "***Search for a function***" box. Click ***Go***, and then click ***OK*** when you find it in the list.



5. A Function Arguments window will open. Click in each "Text" box, and then click on the cell (or enter text) you want to appear. In the example above, click in the ***Text1*** box, and then click in the cell in the Column called "Client Code" on Row 2, then click in the ***Text2*** box and type a –, then click in the ***Text3*** box and click in the cell in the Column called "Pol_type" on Row 2. It should look like this:



6. You can see the formula result in the bottom left corner of the window, the 7 digit TAM client code, then a - , then the policy type.
7. Click ***OK***
8. Click in the cell C1, and move your cursor so it's in the lower right hand corner of the cell. The cursor will change to a *+* sign. Now ***Double Click*** to ***AutoFill*** all the cells below with the same formula.
9. Next, we want to convert the formulas in this column to just data. Highlight the column by clicking on the Column Label (C, for example).
10. Now, right click, ***Copy***

11. Then, right click, ***Paste – Special Values*** – Now the data is the 7 digit Client Code-Policy Type, and not just a formula.

Example: Combine the TAM Client Code with the Policy Type.

Annualize Premium or Commission

Problem: My Search – Policies Current does not annualize my premium or commissions.

Solution: Use Excel formulas to calculate the Annualized Premium and Commissions.

1. Insert a column and name it "Days in Force" to the right of the Expiration Date column.
    a. Formula is ***=+F2-E2*** (F2 is Expiration Date cell, E2 is Effective Date cell). Place cursor in lower right hand corner of the cell, and ***double click***. This will ***autofill*** the column with the formula. (The value in the cell looks like a date, but we will change it in the next step to be a number).
    b. Select column "Days in Force", right click ***Format Cells***.
        i. Category: ***Number***
        ii. Decimal places: ***0***
        iii. Use ***1000 separator***
    c. Sort "Days in Force" column in descending order by clicking on a cell in the column, click the ***Data*** Tab,  . This will sort the column to show you the billing screens with the largest effective date range at the top. Determine if the multi-year policies are reflecting the annual premium or the full term premium.
2. ***Insert*** a column called "Annualized Commission" next to the "Days in Force" column.
    a. Formula is ***=365/G2*N2*** Column G is "Days in Force" and Column N is Co_amt. Place cursor in lower right hand corner of the cell, and ***double click*** to autofill the column with the formula.
3. ***Insert*** a column called "Annualized Premium" to the right of the "Annualized Commission" column.
    a. Formula is ***=365/G2*Q2*** Column G is "Days in Force" and Column Q is Prem. Place cursor in lower right hand corner of the cell, and ***double click*** to autofill the column with the formula.
4. For policies in force less than 31 days, ***Copy*** and ***Paste*** Prem and Co_amt fields to Annualized Premium and Annualized Commission Fields if you don't want these commissions or premiums annualized.

Convert Applied Tam Accounting Month/Year into a Real Date

Problem: The TAM Accounting Month is not a true date. This is a problem when we want to Group transactions by Accounting Month or Year in a Pivot Table

Solution: Use Excel tools to convert that funky month and year to a real date.

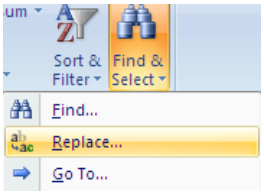
1. ***Insert*** 2 columns to the right of Month column.
    a. Highlight the two columns to the right of the TAM Month Column. Right click on Column. (This will highlight the columns)
    b. Click ***Insert***. You will now have two blank columns to the right of the Month column.

Text to Columns

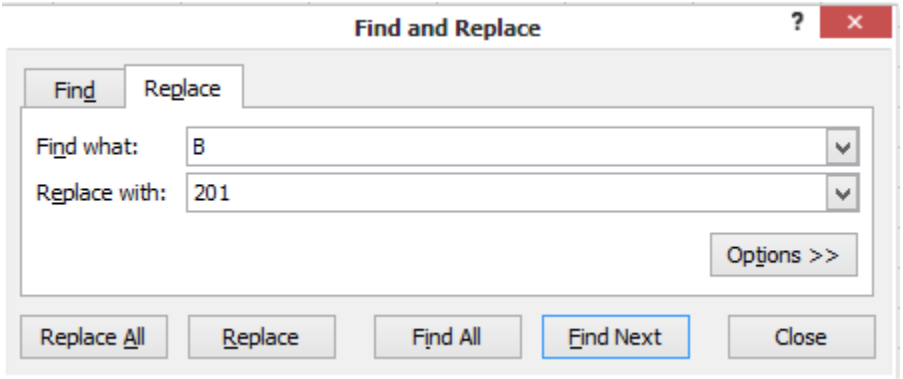
2. Use ***Text to Columns*** to split up month and year into two columns
    a. Highlight the Month column
    b. Click ***Data – Text to Columns***
    c. Choose ***Fixed Width***. Click ***Next***.
    d. Click between the 2nd and 3rd characters. A line will appear showing how the text will be split. Click ***Next***. Click ***Finish***.

Replace

3. ***Replace*** the letter in the two digit year (**B2**) so you have a four digit real year
    a. ***Highlight*** the column with the two digit year.
    b. Click ***Home***, ***Find and Select*** from the ***Editing Tab***.

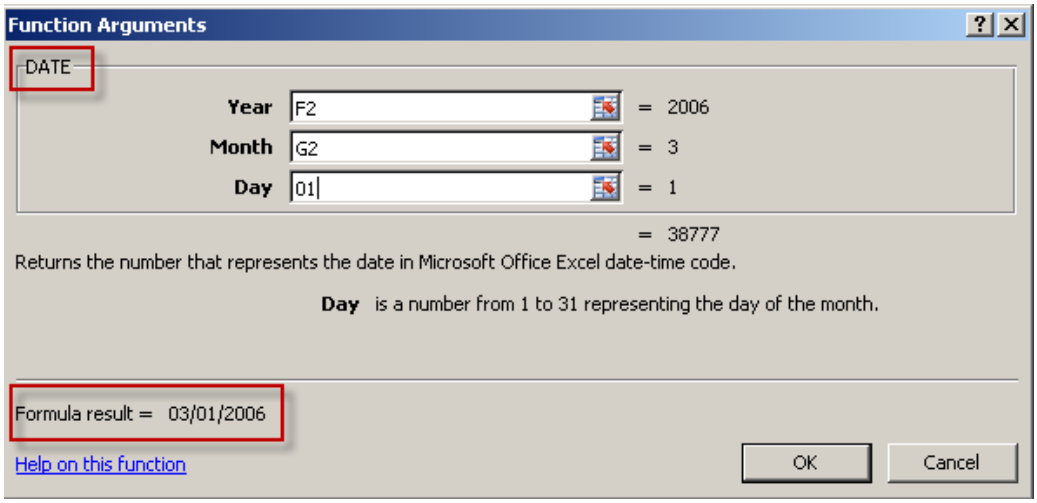


    c. Click ***Replace***
        i. Find What: ***B***
        ii. Replace With: ***201***
        iii. Click ***Replace All***.
        iv. Repeat for all applicable years in spreadsheet.



Date Function

4. Use the ***Date Function*** to combine the Year and Month to create a real date.
    a. In the other blank column created in Step 1, enter a heading: **Month**
5. Click the Insert Function button  , and select ***DATE*** from the list of functions (if you can see it), or type the word DATE in the "***Search for a function***" box. Click ***Go***, and then click ***OK*** when you find it in the list.
    a. Click in the field named "Year", then click on the cell with the year
    b. Click in the field named "Month", then click on the cell with the month
    c. Type **01** in field named "Day"
    d. Click **OK**



6. If you see a number instead of a date (38777) in the example above, you just need to format the cell as a date (currently it's a number).
7. ***Autofill*** the formula to the remaining cells in the column.
8. Use the ***Copy – Paste Special –Values*** to convert the new date from a formula to an actual date.
9. Delete the columns for the Year and Month.

Example: Convert TAM accounting month in Production Report to Real Date

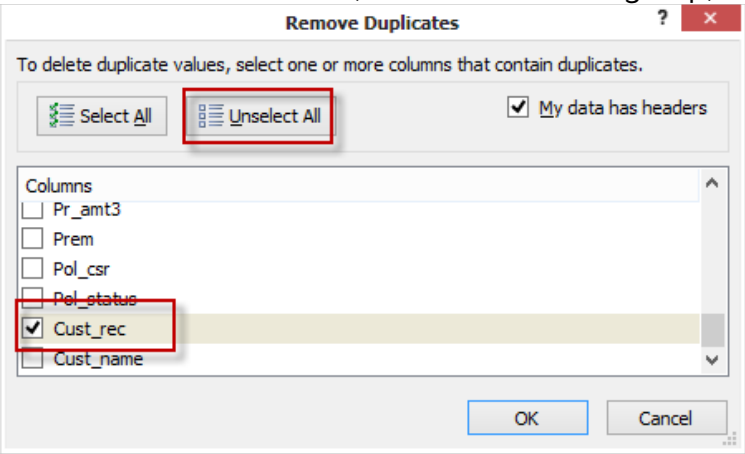
Remove Blank Rows from a Worksheet

1. Select the range of data that contains the duplicate rows.
2. From the ***Home*** tab, ***Editing*** Group, click the small arrow next to ***Find & Select***.Select ***Go To Special***.
3. Select the **Blanks** radio button and click **OK**.
4. All blank rows within the selected data range will be highlighted.
5. From the ***Home*** tab, ***Cells*** Group, click the small arrow next to ***Delete***
6. Select **Delete Sheet Rows**

Example: Insert a couple of blank rows, and then practice removing them.

Remove Duplicate Rows from Worksheet

1. From the ***Data*** tab, in the ***Data Tools*** group, click ***Remove Duplicates***.



2. Notice all the columns are checked, so click ***Unselect All.*** Now click on the columns you want to use to remove duplicates.
3. Click ***OK***, and the duplicate rows will be removed.

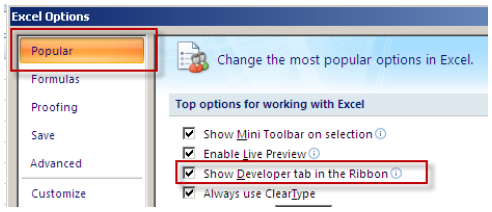
Example: Remove duplicate customer codes since I want to get a customer count, not a policy count.

Macros

A Macro can save you time by recording keystrokes that can be replayed when you need them.

Developer Tab

If you don't see the Developer Tab, Click the Microsoft Office Button, and then click Excel Options. Click Popular, and then select the Show Developer tab in the Ribbon check box.



In Excel 2010 or 2013, go to File, Options, Customize Ribbon, and check the box under Main Tabs for Developer, click OK.

Macro Security Settings

To set your Macro Security settings, click on the ***Developer*** Tab, ***Code*** group, ***Macro Security***. See Microsoft Excel Help for explanations of the various Macro Security Settings. In order for the new Security settings to take effect, you must Close and Re-open Excel.

Record a Macro

Example: Record a macro to create a column with the 7 digit Client Code from the Policy Index, and then combine it (Concatenate) with the Policy Type into another column.

- On the ***Developer*** Tab, in the ***Code*** Group, click ***Record Macro***. Give the Macro a name (No spaces allowed in the name). Now, every keystroke you make is being recorded, so even if you make a mistake, the correction is being recorded, too!
- Follow the steps in the ***LEFT FUNCTION*** and ***CONCATENATE*** sections to insert the column for the Client Code and the column for the Client-Policy Type.
- To stop recording the macro, click on ***Stop Recording*** button in the ***Developer*** tab, ***Code*** group.
- Now delete the new column you just created, and try running your new macro.

Run the Macro

From the ***Developer*** tab, in the ***Code*** group, click ***Macro***. Select the desired Macro, and Click ***Run***.

Vlookup

Here's the scenario: I've got a Book of Business report exported to Excel from TAM. It does not include the Customer Name, just the Policy Index or, if the report was sorted by Customer, the Customer Code will be in the Mainsort column with a C in front of every Customer Code.

I can insert a Column, and use the ***Left*** function on the Pol_idx column. That's great, but I still don't have the Customer Name on the spreadsheet. Here's where the ***VLOOKUP*** function comes in.

Run a Search from TAM that includes the Customer Code AND the Customer Name. This can be done from a Search-Customers, Main File. For this example, only include the Customer Number and Customer Name as the Selected Fields. When the Excel file opens, copy and paste the data found in the Search into another worksheet in the workbook containing the Book of Business report. Now you have the Book of Business report and the Search-Customers, Main File report in the same workbook.

In your sample workbook, the Sheet named **"Vlookup BOB"** is our Book of Business Report exported to Excel, and **"Vlookup-Name"** is the table of data (the table array). This is the sheet that has the information (Customer Name) we want to put on the Book of Business report

Note: Before using VLOOKUP, make sure the table of data (the table_array) is sorted in ascending order (alphabetically A to Z).

Here's how the vlookup sheets in the sample workbook should look now:

	A	B	C	D	E	F
1	Commamt	Pol_idx	Client Code	Effective	Expires	Bco
2	160	ABBOJO1-1001	ABBOJO1	9/12/2011	9/12/2012	PRO
3	15	ABBOJO1-1002	ABBOJO1	9/12/2011	9/12/2012	PRO
4	62.5	ABBOJO1-2001	ABBOJO1	4/12/2012	10/12/2012	GAI
5	50	ABBOJO1-4001	ABBOJO1	7/12/2011	7/12/2012	CIG

Vlookup - BOB Report

	A	B
1	Ins_rec	Name
2	ABBOJO1	Joseph W. Abbot
3	ADLEDE1	Dean R. & Susan J. Adler
4	ANDENA1	Dr. Nancy Anderson
5	BOOKR-1	Mary Lewis D/B/A
6	BOXHI-1	Box Hill Systems Corporation
7	BROWMI1	Michael & Colleen Brown
8	BROWMI2	Michael Brown

Vlookup Code and Name

In this example, the VLOOKUP function will compare the value in cell C2 on the **"Vlookup-BOB"** sheet to the values in Column A of the "**Vlookup Names"** sheet. When it finds an exact match, it will enter the value that was found in Column B of **"Vlookup Names"** sheet (the Customer Name) into the designated cell (Column D) on the **"Vlookup-BOB"** sheet.

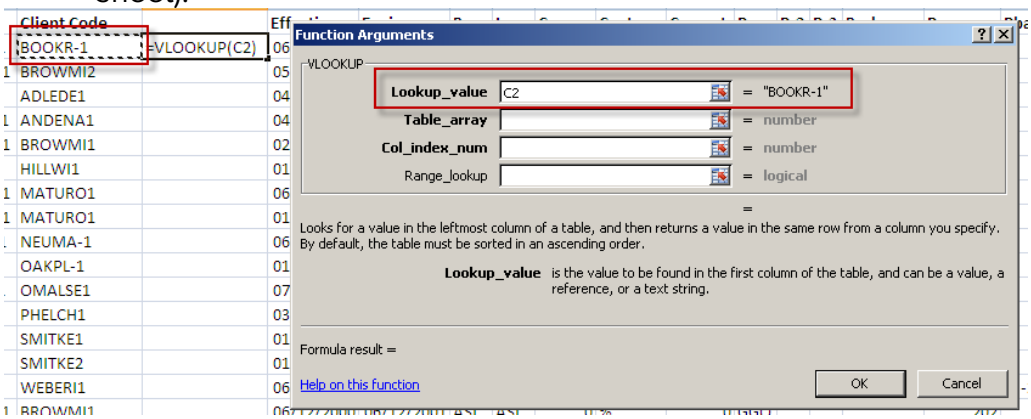
1. ***Insert*** a Column to the left of Column D in on the **"Vlookup-BOB"** sheet.

	A	B	C	D	E	F
1	Commamt	Pol_idx	Client Code		ective	Expires
2	160	ABBOJO1-1001	ABBOJO1		9/12/2011	9/12/2012
3	15	ABBOJO1-1002	ABBOJO1		9/12/2011	9/12/2012
4	62.5	ABBOJO1-2001	ABBOJO1		4/12/2012	10/12/2012
5	50	ABBOJO1-4001	ABBOJO1		7/12/2011	7/12/2012
6	136.65	ADLEDE1-1001	ADLEDE1		4/1/2012	10/1/2012

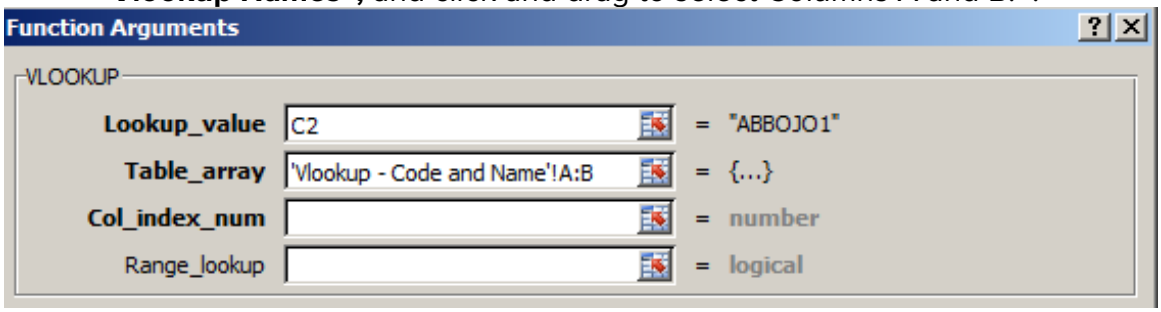
Vlookup - BOB Report

2. Click the Insert Function button  , and select ***VLOOKUP*** from the list of functions (if you can see it), or type the word VLOOKUP in the "***Search for a function***" box. Click ***Go***, and then click ***OK*** when you find it in the list.

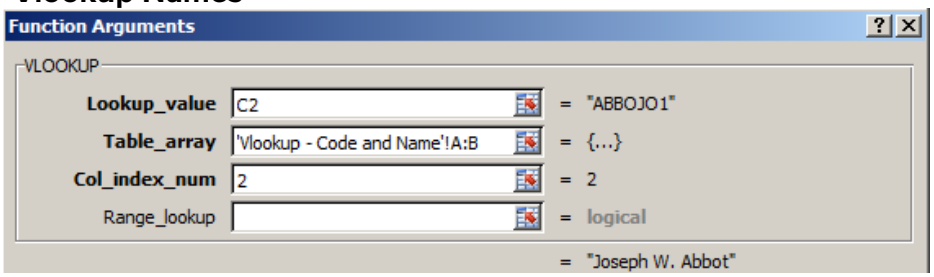
3. A Function Arguments window will open. Place your cursor in the Lookup_value field, and then click on cell C2 (the first Client Code listed on the **"Vlookup-BOB"** sheet).



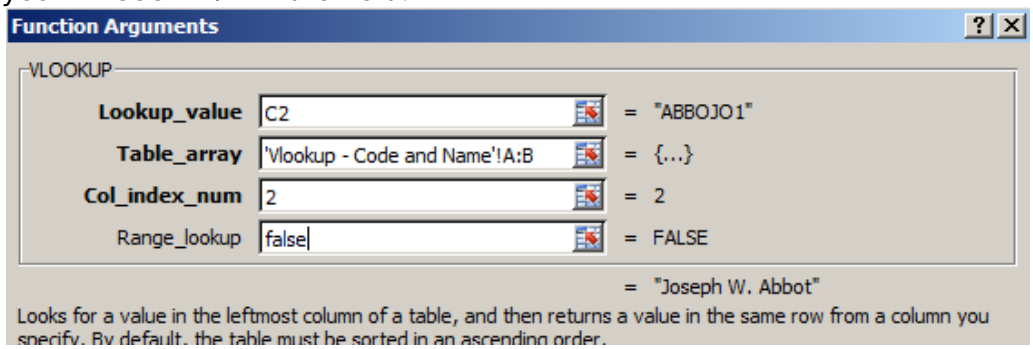
4. Place your cursor in the Table_array field, then click on the Sheet named **"Vlookup Names",** and click and drag to select Columns A and B. .



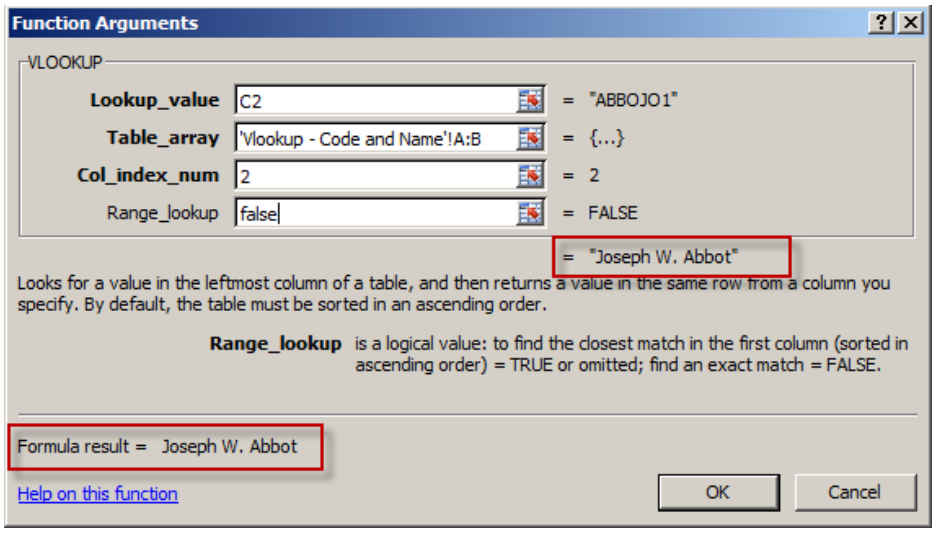
5. Place your cursor in the Col_index_num field and enter 2. This is telling Excel that the value we want (the Customer Name) is in Column 2 on the Sheet named **"Vlookup Names"**



6. In the Range_lookup field, type ***FALSE***. This means if there is no match found, you will see #N/A in the field.



7. You can see the formula result (the Customer Name) in the bottom left corner of the window.

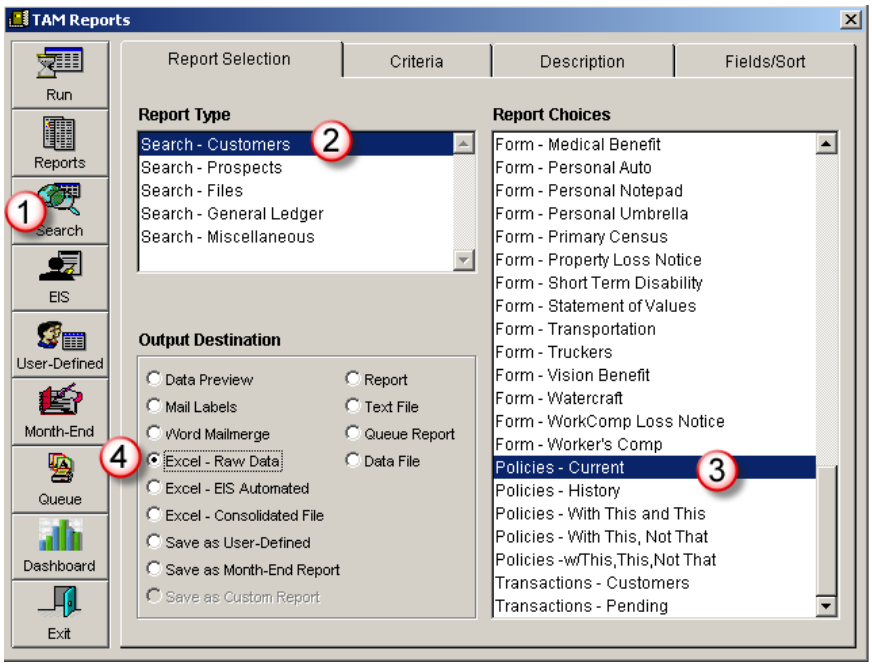


8. Click ***OK***
9. **Autofill** the formula into all the cells below cell D2 by placing your cursor in the bottom right hand corner of the cell. When the cursor changes to a black plus sign, double click. This will copy the vlookup formula into all the cells below.
10. If you'd like to convert the formula to the actual text, use the **Copy – Paste Special Values** tool.

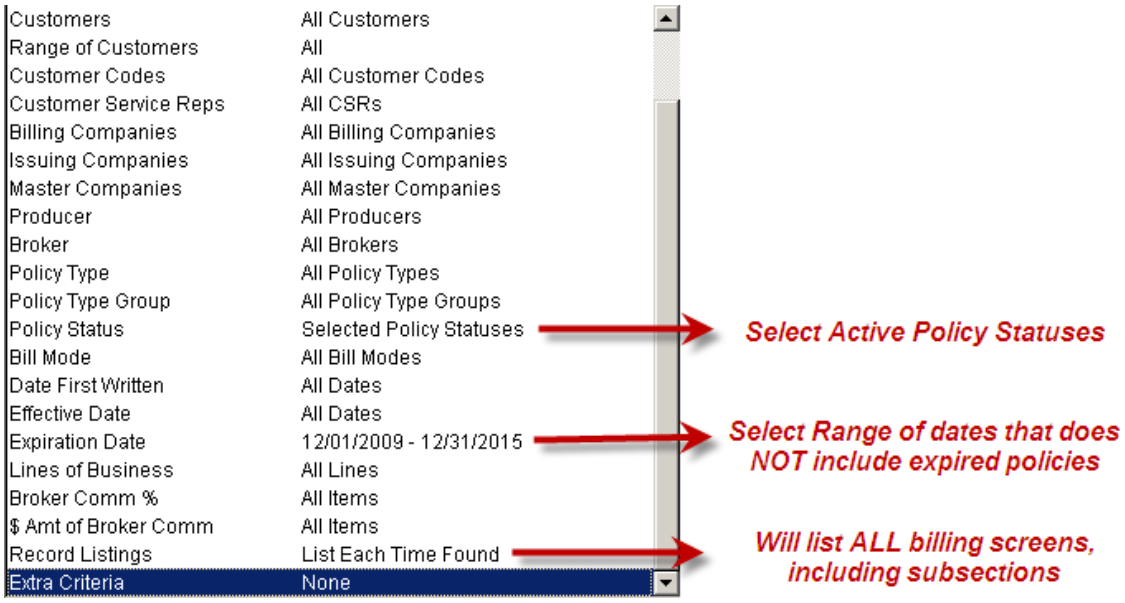
APPENDIX I

Sample Search-Customers, Policies Current Criteria/Fields

1. From TAM *Homebase*, Click *Reports – Search*
2. *Search – Customers*
3. *Policies – Current*
4. **Output Destination** – *Excel-Raw Data*



5. **Criteria** Tab



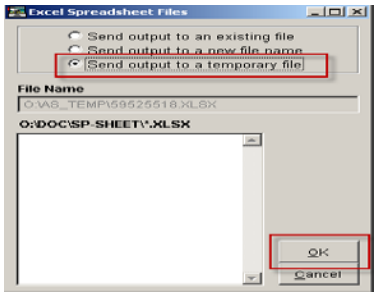
a. **Policy Status** – Only ***ACTIVE*** policy statuses (NEW, REN, REI, REW – whichever codes YOUR agency uses)
b. **Expiration Date** – You might want to limit the Expiration Date range to include only billing screens that are expiring after the month you are closing. For example, if you are running the report at November 30, 2009, choose an Expiration Date range of 12/01/09 thru 11/30/2015. This will keep all the old billing screens with inaccurate policy statuses from skewing the report, but include all expiration dates in the next six years.
c. **Record Listings** – Choose "*List Each Time Found*", and then manipulate in Excel to get only the commission and premium on the main package or on the subsections.

6. **FIELDS/SORT** (Include as many as desired, but be consistent each month)

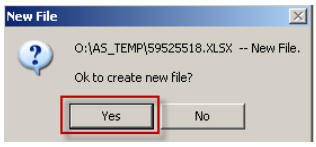
Field Name	Excel Column Title
Customer/Pol_idx Number	Pol_polidx
Agency	Pol_agcy
Branch	Pol_brch
Department	Pol_dept
Policy Number	Pol
Policy Effective Date	Effective
Policy Expiration Date	Expires
Date First Written	Fwritten
Policy Type	Pol_type
Policy Type Group	Typegroup
Issuing Company	Ico
Billing Company	Bco
Type of Agency Commission	Co_type
Total Commission Amount	Co_amt
Total Commission %	Com_p
Billing Mode	Bill
Producer One	Pr1
Producer One Comm %	Pr_p
Producer One Comm $	Pr_amt1
Producer Two	Pr2
Producer Two Comm %	Pr_p2
Producer Two Comm $	Pr_amt2
Producer Three	Pr3
Producer Three Comm %	Pr_p3
Producer Three Comm $	Pr_amt3
Policy Premium	Prem
Policy Status	Pol_status
Policy Customer Service Rep	Pol_csr
Customer Number	Cust_rec
Customer Name	Cust_name

7. 

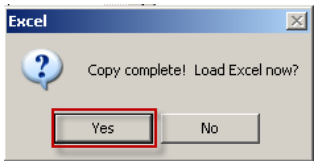
When finished selecting fields, click **Run**.

8. 

Always choose the 3rd radio button to "*Send output to a temporary file*". Click **OK**

9. 

Click "**Yes**" to create a new temporary file.

10. 

Click "**Yes**" to Load Excel.

- Excel will open with your Billing Screen data.
- **SAVE EXCEL REPORT**.
    a. Suggestion: Save the report each month to a folder called **Active Billing Screens**. Name each file using the format: ABSYearMonthDay
        November, 2013 would be ABS2013_11_30
        December, 2013 would be ABS2013_12_31
    This way all the billing screen "snapshots" will be in chronological order in the **Active Billing Screen** folder.