

# Producing Labels Using If/Then Logic

**Product:** ARPEGGIOTM  
R&R Report Writer® for  
Windows®  
**Version:** All

**Host:** N.A.  
**NIC:** N.A.  
**Interface:** N.A.  
**Oper Sys:** Microsoft® Windows® NT®

## Summary

R&R Report Writer allows you to easily produce a mailing labels report. The *Getting Started* booklet includes an example of a typical mailing labels report. However, you might need to produce a more complex mailing labels report that makes use of the If/Then/Else logic in R&R Report Writer. For example, you might want to mail information to the highest-ranking officer at each company in your customer database. This technical bulletins describes how to do this.

## Using If/Then/Else Logic

If you want to mail information to the highest-ranking officer at each company in your customer database, your customer database needs to contain the names of the highest ranking individuals within each company. The database might have a structure like this:

<u>Field Name</u>	<u>Type</u>
CEO	Character
PRESIDENT	Character
CFO	Character
VP_OPS	Character
VP_PURCH	Character
VP_RND	Character
COMPANY	Character
ADDRESS	Character
CITY	Character
STATE	Character
ZIP	Character

For each record in the table, one of the job title fields (CEO, PRESIDENT, CFO, VP\_OPS, VP\_PURCH, or VP\_RND) contains a person's name; the other job title fields in that record are empty. The COMPANY and all other address fields contain entries in each record. The companies are structured such that a CEO always ranks higher than a PRESIDENT, who is always above the CFO, and so forth.



You can easily target a mailing to the person in any of these positions by designing a mailing labels report that includes fields for the company name, address information, and the appropriate title field (CEO, PRESIDENT, CFO, etc.). For example, if you are preparing a mailing for Chief Financial Officers, you can simply put the CFO field on the report and print it. However, some records in the database have no entry in the CFO field, so you will end up with labels that have no addressee. This is where If/Then/Else logic comes in handy. To compensate for information that is missing from the database, you can use R&R Report Writer to “add” the necessary field to the composite record.

One of the primary uses for Calculated Fields in R&R Report Writer is to add a field to the composite record when information you need is not already stored in the database. The calculation operators and functions contain all the power you need to calculate numbers, dates, and character strings. With over 80 functions, this part of the program can seem a bit overwhelming at first. Fortunately, once you click on the Calc button or choose Calculations/Calculated Field you can use Help to look up information about each function. In the Help system, functions are listed by data type so you can look up all numeric, date, or character functions.

R&R Report Writer includes the Immediate If (IIF) function, which is ideal for performing If/Then logical operations. This function is named after the corresponding Xbase function for *immediate if*. The IIF function determines whether a specified condition is true or false, then returns the value you designate. Since you can nest IIFs (insert an IIF within another IIF in the same calculated field expression), you can extend If/Then logic to cover If/Then/Else situations as well. Thus you can easily build an expression that checks for the presence of a name in one of the title fields.

To solve the problem presented here, we created a calculated field that uses If/Then/Else logic. Follow these steps to create a calculated field in R&R:

1. Click the Calc button or select Calculations/Calculated Field. You see the Calculated Fields dialog box.
2. To create a new calculated field, click the New... button. You see the New Calculation dialog box.
3. In the Field Name: box, enter the name TO\_WHOM for the calculated field.
4. In the Expression: box, enter the following expression:

```
IIF(CEO,CEO,IIF(PRESIDENT,PRESIDENT,IIF(CFO,CFO,IIF(VP_OPS,VP_OPS,  
IIF(VP_PURCH,VP_PURCH,IIF(VP_RND,VP_RND,"")))))
```

5. When you finish entering the expression, select OK to close the New Calculation dialog box, then Close to return to the layout.

This calculated field expression says that if the Chief Executive Officer (CEO) field contains a name, use it; otherwise, if the President field contains a name, use it; otherwise, if the Chief

Financial Officer (CFO) field contains a name, use it; and so on, checking each of the fields in a similar fashion. It is important to note how the expression handles exceptions: if there is no entry in any of the database fields, TO\_WHOM will return an empty string, represented by the double quotation marks ("").

To avoid sending a letter without any name on it, you can tell R&R Report Writer not to generate a label if the TO\_WHOM field is empty. You can use the Query facility to eliminate all records in which the TO\_WHOM field contains the empty string.

1. Click the Query button or select Database/Query from the menu bar. You see the Insert Selection Rule dialog box.
2. In the Field: list, select the calculated field TO\_WHOM.
3. In the Comparison: list, select not equal to 4. In the Compared to: box, type two quotation marks (""), which stand for the empty string.
4. Click OK to exit the Insert Selection rule dialog, then OK again to return to the layout.

We also want to include the title of the addressee next to the individual's name. To do so, we need to create another calculated field quite similar to the TO\_WHOM field. We can use a shortcut to copy the expression for one calculated field to another.

1. Click on the Calc icon and select New... to create the field.
2. Enter the new calculated field name TITLE.
3. Click the Calc Expression... button. You see a list of all the calculated fields created for this report. Select TO\_WHOM. R&R Report Writer copies its expression into the Expression... box.
4. Edit the expression so that it reads:

```
IIF(CEO,"Chief Executive Officer",IIF(PRESIDENT,"President",IIF(CFO,"Chief  
Financial Officer",IIF(VP_OPS,"VP - Operations",IIF(VP_PURCH,"VP -  
Purchasing",IIF(VP_RND,"VP - Research & Development","")))))
```

5. When you finish editing the expression, click OK to exit the New Calculation dialog box, then OK again to return to the layout.

Now that you have created both of the calculated fields you need, designing the mailing label report is straightforward. Create four Record lines (Insert/Create Band Line) and insert the fields on the layout. To allow for names and addresses of different lengths, you may want to turn on auto-trim for all the fields: highlight all the fields on the layout and click the Trim button on the Format Bar. The report should now be ready for use.



## Technical Bulletin: Producing Labels Using If/Then Logic

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