Sage Summit 2012 Conference

Getting Started With Sage 300 Construction and Real Estate Office Connector

Generate Excel-Based Reports

Session Code: C-0637

Product: Sage 300 Construction and Real Estate

CPE Credit: 1.5

Presenters:

- **James Coyle, Event 1 Software**
- **Michael Newland, Event 1 Software**

Description

In this session, participants will generate Excel workbooks from the Office Connector Launch Pad based on business requirements. Participants will learn when a workbook can be customized and how to approach the customization process, including how to create additional worksheets within the workbook. This session is appropriate for any Sage 300 Construction and Real Estate customer who wants to start leveraging Excel-based expertise and skills to get the information needed from Office Connector software. Even if you don't yet own Office Connector, join us for this working session, where you'll learn through hands-on practice how to jump-start your Excel-based reporting initiatives!

Learning Objectives

At the end of today's session, you will be able to:

- Generate workbooks based on Office Connector Launch Pad Templates.
- Customize workbooks to meet your specific information and reporting needs.
- Establish plans for your organization to integrate Excel-based reporting into your information management initiatives.

To Do After the Conference

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Notes

Starter Reports

Overview

- Installed with Sage 300 Construction and Real Estate
- Six Reports
  - Account Ledger with Detail
  - Cost To Complete
  - Job List with Maps and Weather
  - Lease Expiration
  - Sage Timberline Office Dashboard
  - Search Sage Timberline Office
- No license required to use reports

Customization

In general, customization of Starter reports is limited to Excel functionality. Office Connector functionality cannot be changed.

Type Of Customization	Yes	No
Add/Edit Excel Formulas	✓	
Change Formatting & Layout	✓	
Insert New Worksheets	✓	
Show/Hide worksheets, rows, columns	✓	
Add/Modify/Delete Queries		×
Add/Modify/Delete TS Formulas		×
Add/Modify/Delete Excel Macros		×

Exercise #1 – Customizing a Starter Report

In this exercise, you will customize the Cost To Complete report by adding a column that displays the Division for each row. Next, you will add a new worksheet that provides a summary of the data from the Cost To Complete worksheet summarized by Division. Finally, you will save your customized template so that it can be launched from the Starter tab of Office Connector Launch Pad.

Part 1 – Locating Your Reports

1. Start Excel
2. Click the **Add-Ins** tab of the ribbon
3. In the **Menu Commands** group, click **Office Connector**, **Help**, **Environment**, and then **View System Information**
4. Locate the **System Folder** entry in the **Event 1** section of the report. Make note of the path that is displayed here.
5. Close Excel

Part 2 – Copy The Template

1. Open Windows Explorer
2. Navigate to the folder you identified in Part 1, step 4.
3. Double-click the **OC2** folder.
4. Double-click the **Reports** folder.
5. Double-click the **Starter** folder.
6. Right-click on **Cost To Complete.xlt** and click **Copy**
7. Press Ctrl + V.
8. Right click on **Cost To Complete – Copy.xlt** and click **Rename**
9. Type: `Cost To Complete with Summary` Enter.
10. Right-click on **Cost To Complete with Summary.xlt** and click **Open**
11. Click the **Admin** worksheet
12. Click in cell C5 (**Job Number**) and type: `03-001`
13. Click in cell C7 (**As Of Date**) and type: `5/31/2011`
14. Click **Refresh Report**

15. In the **Select Sage Timberline Office Company** window, select **Timberline Construction** and click **OK**

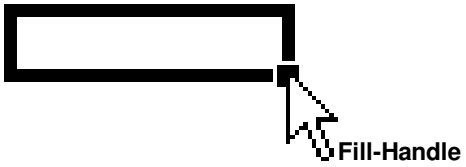
Part 3 – Insert a Column

1. Click the **Cost To Complete** worksheet
2. Click the column letter for column B, right-click on it, and then click **Insert**
3. Click in cell B12 and type: `Division`
4. Click in cell B13 and type: `=LEFT(C13,SEARCH("-",C13)-1)`

NOTE: The SEARCH function returns the character position of the first occurrence of a dash in the Cost Code value stored in cell C13. The LEFT function returns the first N number of characters from the beginning of the Cost Code, where N is specified in the second argument (using the SEARCH function). This allows us to extract out the division number regardless of whether it is one character or two characters in length.

5. Double-click the fill-handle of cell B13 to copy the formula down to each row

NOTE: The fill-handle is the solid box in the lower-right corner of the cell: When you double-click this box, the formula in the cell will be copied down.



Part 4 – Add a Summary Worksheet

1. Click  to add a new worksheet.
2. Right click on **Sheet1** and click **Rename**
3. Type: `Division Summary`
4. Type the following values in these cells:

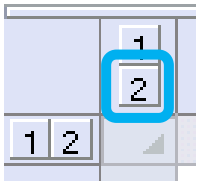
TIP: For the sake of completing this exercise timely during class, you may elect to not enter the descriptions in column C.

	B	C
13	1	GENERAL CONDITIONS
14	2	SITEWORK
15	3	CONCRETE
16	4	MASONRY
17	5	METALS
18	6	WOOD & PLASTICS
19	7	THERMAL MOISTURE PROTECTION
20	8	DOORS & WINDOWS

	B	C
21	9	FINISHES
22	10	SPECIALTIES
23	11	EQUIPMENT
24	12	FURNISHINGS
25	13	SPECIAL CONSTRUCTION
26	14	CONVEYING SYSTEMS
27	15	MECHANICAL
28	16	ELECTRICAL

5. Click the **Cost To Complete** worksheet
6. Click the 2 button in the top margin to expand all columns

NOTE: The row and column group buttons appear in the upper left corner of the worksheet and allow you to quickly expand or collapse the grouped columns or rows at a given grouping level.



7. Select cells E11 through Q12
8. Right click on the selected range and click **Copy**
9. Click the **Division Summary** worksheet
10. Right click cell D11 and click **Paste**
11. Click in cell D13 and type:

```
=SUMIF('Cost To Complete'!$B$13:$B$72,$B13,'Cost To
Complete'!E$13:E$72)
```

NOTE: The number 72 represents the last row of data on the Cost To Complete worksheet. If your data ends on a different row, change this number so that it reflects the last row of your data.

NOTE: Pay specific attention to the placement of the dollar signs in the cell references. These represent the absolute portions of the cell references that must not change when the formula is later copied to other columns and rows.

12. Copy the formula from cell D13 to all cells in the range D13 through O28
13. Click in cell P13 and type: `=IF(F13<>0,O13/F13,0)`
14. Double-click the fill handle of cell P13 to copy it down to each row
15. With the cells in column P still selected, click the **Home** tab of the ribbon and then click **%**
16. Click in cell D30 and type: `=SUM(D13:D28)`
17. Copy the formula in cell D30 to cells E30 through O30

18. Copy the formula in cell P28 to cell P30

Part 5 – Save Your Customized Template

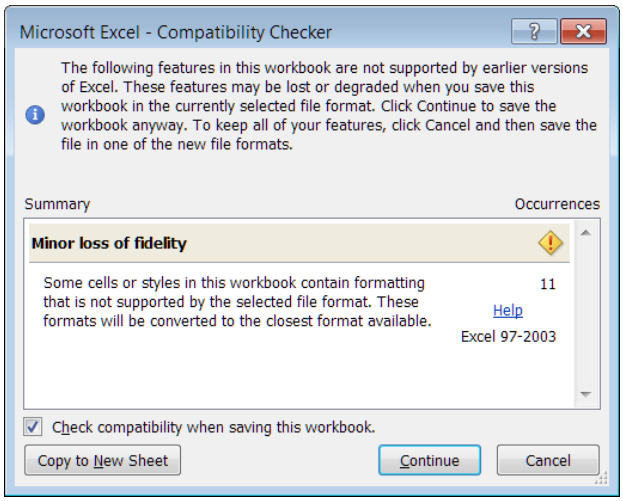
1. Click the **Admin** worksheet
2. Click in cell C5 and tap the Delete key
3. Click in cell C7 and type: `1/1/1901`
4. Click **Refresh Report**

NOTE: Steps 2 through 4 merely clear the contents of any data so that the template does not have any test values stored in it.

5. Click the **Information** worksheet
6. Click **File** and then **Save**
7. **IMPORTANT:** When you receive the following prompt, click **No**

   This workbook contains external data. Do you want Microsoft Excel to clear the data before saving the template, and then automatically refresh the data whenever the template is opened?

NOTE: When saving the template, you may receive the following notice:



This is because the template was saved as an Excel 97-2003 Template so that it will be compatible with current versions of Excel as well as Excel 2003. This notice is telling you that since you are using a newer version of Excel, there are some formatting and other features that apply to the current version of Excel, but not older versions. If you have used any styles or formatting that isn't supported by the older versions, they will therefore be lost. This window helps you identify potential issues that you may want to address.

The alternative is to save the template in the native format of Excel 2007 and higher by selecting the Excel Template file type.

8. Close Excel

Part 6 – Test Your Customized Template

1. Open **Office Connector Launch Pad**
2. Click the **Starter** tab
3. Double-click on **Cost To Complete with Division Summary**
4. Follow the steps listed on the **Information** worksheet to test the report.

Exercise #2 – Customizing a Query Template

In this exercise, you will modify the standard Work In Process template to include the name of the project manager for each job as well as a new calculation.

Part 1 – Locating Your Reports

1. Start Excel
2. Click the **Add-Ins** tab of the ribbon
3. In the **Menu Commands** group, click **Office Connector**, **Help**, **Environment**, and then **View System Information**
4. Locate the **System Folder** entry in the **Event 1** section of the report. Make note of the path that is displayed here.
5. Close Excel

Part 2 – Copy The Template

1. Open Windows Explorer
2. Navigate to the folder you identified in Part 1, step 4.
3. Double-click the **OC2** folder.
4. Double-click the **Reports** folder.
5. Right-click on **JC Work In Progress.xlt** and click **Copy**
6. Press Ctrl + V.
7. Right click on **JC Work In Progress – Copy.xlt** and click **Rename**
8. Type: `Work In Progress Enhanced.xlt` Enter.
9. Right-click on **Work In Progress Enhanced.xlt** and click **Open**
10. Click the **WIP** worksheet.
11. Click **Refresh Timberline Data** on the Office Connector toolbar.
12. In the **Select Sage Timberline Office Company** window, select **Timberline Construction** and click **OK**

Part 3 – Add Project Manager Column

1. Click the column letter for column E, then right-click on it and click **Insert**
2. Click in cell E7 and type: `Project Manager`
3. Click in cell E10.
4. Click the **Add-Ins** tab of the ribbon
5. Click **Lookup Wizard** on the Office Connector toolbar
6. In the **Table** list, scroll down and select **JC Job (1)**, and click **Next**
7. In the **Value** column of the Job row, type: `A10`
8. Click **Next**
9. Scroll down and check the **Project Manager** box
10. Click **Finish**
11. Double-click the fill-handle of cell E10 to copy the formula down to each row.

Part 4 – Add Estimated Profit Margin Column

1. Click the column letter for column K, then right-click on it and click **Insert**
2. Click in cell K7 and type: `Estimated Profit Margin`
3. Click in cell K10 and type: `=IF(F10<>0,(F10-P10)/F10,0)`
4. Click in cell K10
5. Click the **Home** tab of the ribbon and then in the **Number** group, click **%**
6. Double-click the fill-handle of cell K10 to copy the formula down to each row.
7. Copy the formula from cell K10 to cell K25 (the total row) and format this cell as a percent also.

Part 5 – Save Your Customized Template

1. Click the **Information** worksheet
2. Click **File** and then **Save**
3. Close Excel

Part 6 – Test Your Customized Template

1. Open **Office Connector Launch Pad**
2. Click the **Reports** tab
3. Double-click on **JC Work In Progress Enhanced**
4. Follow the steps listed on the **Information** worksheet to test the report.

Exercise #3 – Modify a Standard Write Template

In this exercise you will modify the AP Invoice Approval template so that it can be used instead for payment selection (assuming that you don't use the approval system).

Part 1 – Locating Your Reports

1. Start Excel
2. Click the **Add-Ins** tab of the ribbon
3. In the **Menu Commands** group, click **Office Connector**, **Help**, **Environment**, and then **View System Information**
4. Locate the **System Folder** entry in the **Event 1** section of the report. Make note of the path that is displayed here.
5. Close Excel

Part 2 – Copy The Template

1. Open Windows Explorer
2. Navigate to the folder you identified in Part 1, step 4.
3. Double-click the **OC2** folder.
4. Double-click the **Reports** folder.
5. Right-click on **Write AP Invoice Approval.xlt** and click **Copy**
6. Press Ctrl + V.
7. Right click on **Write AP Invoice Approval - Copy.xlt** and click **Rename**
8. Type: `Write AP Payment Selection.xlt` Enter.
9. Right-click on **Write AP Payment Selection.xlt** and click **Open**
10. Click the **WIP** worksheet.
11. Click **Refresh Timberline Data** on the Office Connector toolbar.
12. In the **Select Sage Timberline Office Company** window, select **Timberline Construction** and click **OK**

Part 3 – Remove Approval Columns

Since the exercise pertains to transforming this template from one that would be used with the Accounts Payable approval system to one that will be used with payment selection, the first task we need to perform is to remove all of the columns associated with the approval system.

1. Click the **Unapproved** worksheet
2. Right click on **Unapproved** and click **Rename**
3. Type: `Unpaid`
4. Click the  **Select All** box (upper left corner of the worksheet)
5. Right-click on the column letter for column A and then click **Unhide**
6. Click on the column letter for column H, right-click on it, and then click **Delete**
7. Select columns P through R.

NOTE: Hidden columns are often used by templates that write data or create import files. Sometimes hidden columns also contain data or formula results that feed other formulas but don't need to be seen.

8. Right-click on the column letter for column P and then click **Delete**
9. Click in cell H6 and press Delete.

Part 4 – Add Payment Status Columns

In this part, you will add two columns. The first will be a display-only column that shows the current payment status which is stored in the Dist code field of each AP Distribution record. The second column will allow you to make a desired change to the payment selection.

1. Add Payment Status Column (Display Only)
    a. Right-click on the column letter for column H and click **Insert**
    b. Click in cell H8 and type: `Payment Status` Alt + Enter.
    c. Click in cell H9.
    d. Click the **Add-Ins** tab of the ribbon
    e. Click  **Lookup Wizard** on the Office Connector toolbar
    f. Select the table with **AP Distribution** in the **Table** column and **MASTER.APM** in the **File** column and then click **Next**
    g. Supply the keys with which to lookup a record by entering the following values:

Vendor	A9
Invoice	C9
Dist Seq	D9

h. Click **Next**

i. In the **AP Distribution** fields list, scroll down and check the **Dist code** box

j. Click **Finish**

k. Double-click the fill-handle of cell H9 to copy the formula down to each row

2. Add Status Change Column (Data Entry)

We intend for this column to be blank if no change to the status is intended. Since a blank column (or a column containing static values) would prevent formulas to the right from copying down when the query refreshes, we will take certain steps to make sure the default blank value is represented as a formula and also that this is reset to blank whenever the query is going to be refreshed.

a. Right-click on the column letter for column I and click **Insert**

b. Click the **Developer** tab of the ribbon

NOTE: The **Developer** tab is not enabled (visible) by default. If you don't see it, follow these steps to enable it:

1. Click **File** tab, and then click **Options**.
2. In the categories pane (on the left), click **Customize Ribbon**.
3. In the list of main tabs (on the right), check **Developer**.
4. Click **OK** to close the **Options** window.

FOR MORE INFORMATION: Visit the following page on the Microsoft website for more detailed information:

How to: Show the Developer Tab on the Ribbon
http://msdn.microsoft.com/en-us/library/bb608625.aspx

c. In the **Code** group, click **Record Macro**

d. In the **Macro name** box, type: `Before_TSRefreshData`

FOR MORE INFORMATION: Office Connector can run macros that you create with pre-designated names for different events (e.g., the "Before_TSRefreshData" macro is run right before refreshing data). For complete information about this feature, visit the following help topic:

Event Macros
http://www.event1software.com/wp-content/help/officeconnector/mac_event_macros.htm

e. Click **OK**

f. Click in cell I9 and type: `=""` Enter.

g. Click **Stop Recording** (in the **Code** group of the **Developer** tab of the ribbon)

h. Click the **Add-Ins** tab of the ribbon

i. Click **Refresh Data** on the Office Connector toolbar

NOTE: Since the first row in column I contains the formula entered in step (f), this formula was automatically copied down to each row when you refreshed data. This is what will happen during future refreshes as well. The default blank formula will be entered into cell I9 (via the macro) and then the refresh operation will cause it to be copied down to each row.

3. Format Status Change Column for Data Entry

a. Click back into cell I9

b. Click the **Data** tab of the ribbon

c. In the **Data Tools** group, click **Data Validation**

d. In the **Allow** box, click the drop-down and select **List**

e. In the **Source** box, type: `Pay,Hold,Disputed`

f. Click **OK**

g. Click the **Home** tab of the ribbon

h. In the **Styles** group, click the **Cell Style** named **Data Entry**.

i. Double-click the fill-handle for cell I9 to copy its formula, data validation properties, and style down to each row.

j. Click in cell I8 and type: `Status Change` Alt + Enter.

Part 5 – Add Write Columns

1. Add Action Column

a. Click cell R8 and type: `Action`

b. Click cell R9 and type: `=IF(I9<>"","ModifyOnly","")`

c. Double-click the fill-handle of cell R9 to copy it down to each row

NOTE: We'll use the result of this formula in the next column. For now, notice that when you change the value in the Status Change column to one of the three options, this formula returns the text "ModifyOnly". When you clear the value in the Status Change column, this formula returns nothing.

2. Add TSWrite Column

a. Click cell S8 and type: `Write`

b. Click cell S9.

c. Click **Write Wizard** on the Office Connector toolbar

d. Select the table with **AP Distribution** in the **Table** column and **MASTER.APM** in the **File** column and then click **Next**

e. Leave the selection on **Modify Only** and click **Next**

f. Supply the keys with which to lookup a record by entering the following values and then click **Next**:

Vendor	A9
Invoice	C9
Dist Seq	D9

g. In the **AP Distribution** fields list, scroll down, check the **Dist code** box, and click **Next**

h. In the **Value** column for **Dist code**, type: I9

i. Click **Finish**

j. Press Enter, click back in cell I9, and then click *fx* on the formula bar.

k. Click in the **Action** box and type (replacing the current value): R9

l. Click **OK**. The revised formula in cell I9 should look like this:

```
=TSWrite("MASTER_APM_RECORD_2","ODCODE",I9,R9,A9,
C9,D9)
```

NOTE: The Action argument of the TSWrite function tells Office Connector Write what to do. If this value is blank, the TSWrite instruction will be skipped.

m. Double-click the fill-handle of cell S9 to copy the formula down to each row

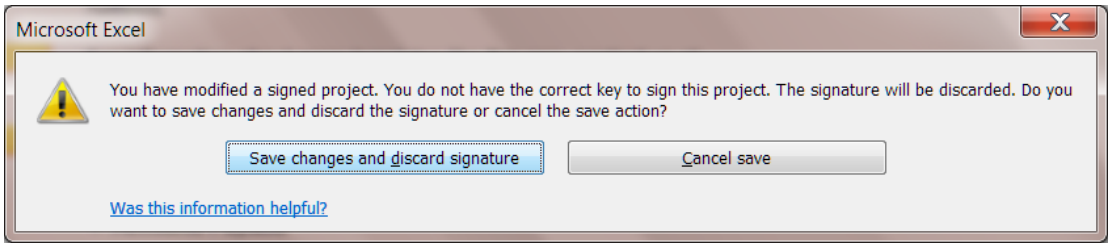
3. **Hide** columns R and S.

TIP: As a best-practice, it is recommended that you change the background color of columns that are to be hidden (e.g., use a gray background). This way, if you making changes to the template at a later date and have unhidden columns, it will be apparent which columns you will need to re-hide before saving your changes.

Part 6 – Save Your Customized Template

1. Click in cell A1 and type: `AP Payment Selection Worksheet`
2. Click the **Information** worksheet
3. Click **File** and then **Save**

NOTE: When modifying a template from Event 1 Software, you may receive the following message when saving your changes:



This occurs because the template was signed with a digitial signature so that if you identify Event 1 Software as a trusted publisher, macros will be automatically enabled. When someone who is not the original publisher makes changes, the digital signature cannot be preserved. Click **Save changes and discard signature** to proceed. This means that when you later use the template, you will see a notice at the top of the window about enabling macros.

4. Close Excel

Part 7 – Test Your Customized Template

1. Open **Office Connector Launch Pad**
2. Click the **Reports** tab
3. Double-click on **AP Payment Selection**
4. Click the **Unpaid** worksheet
5. In the **Status Change** column, change the status of one or more distributions. Make sure to set at least one to a status of **Pay**.
6. Click **Send Data to Timberline** on the Office Connector toolbar
7. Review the pending write operations shown in the **Approve Changes** window.
8. Click **Write**

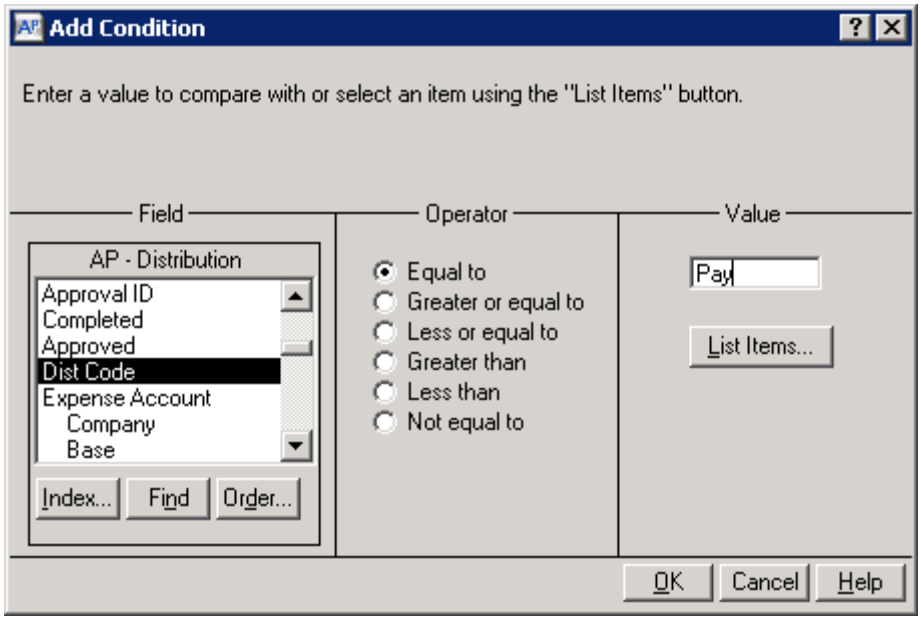
NOTE: After the data has been written, a recap report will be displayed in your browser. This shows a listing of each record and field that was successfully updates as well as any issues that were encountered. Afterwards, you will receive a prompt asking if you want to refresh data. This may be beneficial if any of the queries or functions show the values that would have been updated because you will be able to see the updated information after it has refreshed.

Payment Selection

The value in the Dist code field can now be used in combination with a custom condition when using Automatic or On-Screen payment selection in Accounts Payable. The following steps demonstrate the use of this condition with the On-Screen method.

1. Start Accounts Payable
2. Click the **Tasks** menu then **Select Invoices to Pay**, then click **On-Screen List**
3. Click **Conditions**
4. In the **AP – Distribution** field list, click **Dist code**
5. In the **Operator** box, leave the selection on **Equal to**
6. In the **Value** box, type: `Pay`

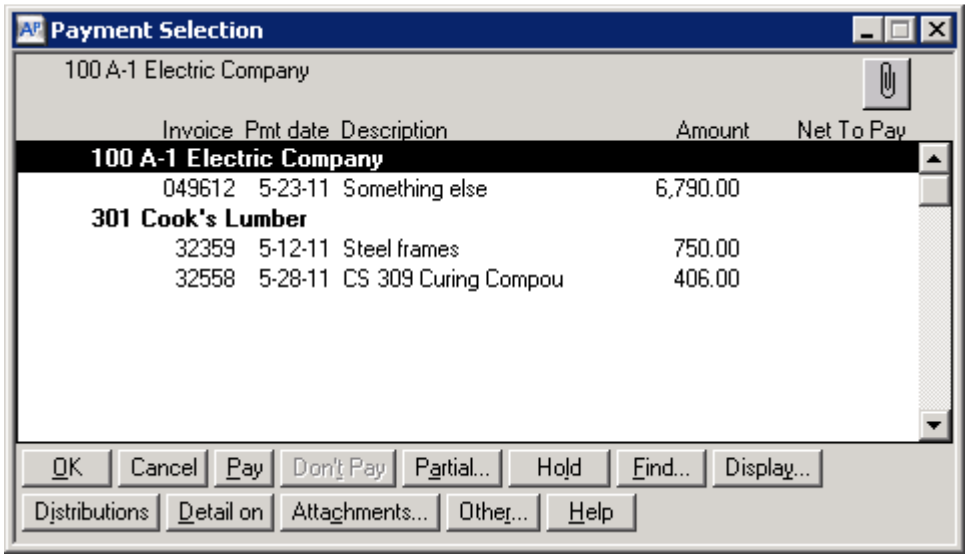
   The Add Condition window should look like this:



7. Click **OK**
8. Click **OK** again to close the **Condition Selection** window
9. Click **Start**

On-Screen List

The Payment Selection window will display a list of only the invoices that contain distributions meeting your condition. You can then select invoices to be paid by double-clicking.



Automatic Selection

If the same condition is used with Automatic selection, invoices meeting the condition will automatically be selected for payment. You can then view and even change the selections (if needed) via the On-Screen list.

Exercise #4 – Update Job Schedules

In this exercise, you will modify the standard JC Job Schedule template to allow the user to update the start and completion dates for jobs. The intent is to provide better control over the scheduled backlog so that it is clear which jobs may be in progress during each calendar month.

Part 1 – Locating Your Reports

1. Start Excel
2. Click the **Add-Ins** tab of the ribbon
3. In the **Menu Commands** group, click **Office Connector**, **Help**, **Environment**, and then **View System Information**
4. Locate the **System Folder** entry in the **Event 1** section of the report. Make note of the path that is displayed here.
5. Close Excel

Part 2 – Copy The Template

1. Open Windows Explorer
2. Navigate to the folder you identified in Part 1, step 4.
3. Double-click the **OC2** folder.
4. Double-click the **Reports** folder.
5. Right-click on **JC Job Schedule.xlt** and click **Copy**
6. Press Ctrl + V.
7. Right click on **JC Job Schedule - Copy.xlt** and click **Rename**
8. Type: `Write JC Job Schedule.xlt` Enter.
9. Right-click on **Write JC Job Schedule.xlt** and click **Open**
10. Click the **Schedule** worksheet.
11. Click **Refresh Timberline Data** on the Office Connector toolbar.
12. In the **Select Sage Timberline Office Company** window, select **Timberline Construction** and click **OK**

Part 3 – Format Data Entry Columns

1. Click the column expander button above the column letter for column I.
2. Select cells E10 through F23
3. Click the **Home** tab of the ribbon.
4. In the **Styles** group, click the **Cell Style** named **Data Entry**.
5. Change the font size of these cells back to 8.
6. Click the **Data** tab of the ribbon
7. In the **Data Tools** group, click **Data Validation**
8. In the **Allow** box, click the drop-down and click **Date**
9. In the **Start date** box, type: `1/1/1901`
10. In the **End date** box, type: `12/31/2050`
11. Click **OK**

Part 4 – Add Action Columns

TIP: You may want to click the + button above column I to collapse the column group before completing this part. Otherwise the frozen columns may occupy most of your screen and it will be difficult to navigate to columns AV and beyond.

1. Click cell AV9 and type: `Start Date Action`
2. Click cell AV10 and type: `=IF(E10<>"","ModifyOnly","")`
3. Double-click the fill-handle of cell AV10 to copy the formula down to each row
4. Click cell AW9 and type: `Completion Date Action`
5. Copy the formula from cell AV10 to cell AW10

Part 5 – Add Write Functions

1. Click cell AX9 and type: `Write Start Date`
2. Click cell AX10
3. Click the **Add-Ins** tab of the ribbon
4. Click **Write Wizard** on the Office Connector toolbar
5. Select **JC Job (1)** and click **Next**
6. Leave the selection on **Modify Only** and click **Next**
7. In the **Value** column for **Job**, type: `$A10`
8. Click **Next**

9. Scroll down, check the **Revised Start Date** box, and click **Next**
10. In the **Value** column for **Revised Start Date**, type: `E10`
12. Click **Finish**
13. Press Enter, click back in cell AX10, and then click *fx* on the formula bar
14. Click in the **Action** box and type (replacing the current contents): `AV10`
15. Press Enter and click **OK**
16. Double-click the fill-handle in cell AX10 to copy the formula down to each row
17. Copy the formula in cell AX10 to cell AY10
18. Double-click the fill-handle in cell AY10 to copy the formula down to each row
19. Hide columns AV through AY.

Part 6 – Save Your Customized Template

1. Click the **Information** worksheet
2. Click **File** and then **Save**
3. Close Excel

Part 7 – Test Your Customized Template

1. Open **Office Connector Launch Pad**
2. Click the **Reports** tab
3. Double-click on **Write JC Job Schedule**
4. Click the **Schedule** worksheet
5. In the **Revised Start Date** and **Revised Comp Date** columns, enter some new date values.
6. Click **Send Data to Timberline** on the Office Connector toolbar
7. Review the pending write operations shown in the **Approve Changes** window.
8. Click **Write**

NOTE: After the data has been written, a recap report will be displayed in your browser. This shows a listing of each record and field that was successfully updates as well as any issues that were encountered. Afterwards, you will receive a prompt asking if you want to refresh data. This may be beneficial if any of the queries or functions show the values that would have been updated because you will be able to see the updated information after it has refreshed.