

Forms, Forms, Everywhere Forms

Gini Courter and Annette Marquis

Session #101 Saturday, July 16, 2005 8:30 am to 11:45 am

There is no getting around it, forms drive organizations. Without them, we'd have no input, no information, no data, no direction. Organizations need forms and like it or not, most organizations rely on their administrative professionals to create them. Should it be a Word form? How about Excel? When should you think about creating a PDF form? What about a Web-based form? Each format has its strengths and its weakness. In this session, we'll explore criteria you can use to decide which software tool to use to create different types of forms. We'll also demonstrate the steps to creating forms in Microsoft Word, Microsoft Excel, and Adobe Acrobat. By the end of this session, you'll know which tool to choose and how to go about creating the best form for the job.

Defining the form

For any form to be effective, you must first be clear about its purpose. Some common questions you might ask before creating a form are:

- What is the purpose of the form?
- What data needs to be collected?
- Who will complete the form? Will it be completed by one person or will several people need to complete sections of it?
- Who needs to review the form before it is submitted? Are approvals required?
- Do you need to aggregate the data entered into all of the forms or does each form stand alone?

Which tool should I use?

Using Microsoft Office 2003, you can create forms using any of the following programs:

(adapted from *Office programs you can use to create an online or printed form* in Microsoft Office 2003 Help)

Word	Forms that contain complex formatting, pictures, linked objects, embedded objects, check boxes, drop-down lists, or text areas that have specific data types, formatting, and default text. You can also set conditions for adding data to a form, include macros that run automatically, and provide Help messages that make it easier for others to complete a form
Excel	Create a form to collect information for use in calculations, analysis, or financial documents.
Access	Same features as Word forms but you can also include Visual Basic for Applications code that runs automatically, and you can provide ScreenTips that also make it easier for users to complete forms. Use Access when you need to collect and store a lot of data, when you need full relational database capabilities, when you want to generate a variety of reports from your data, or when you want to tie your forms together into a program.
FrontPage	Create a form on a Web page to collect information from site visitors or to let visitors search for information on your Web site.
Outlook	Customize mail messages, appointments, and any other Outlook item as an easy way to distribute and collect information electronically. By using Outlook forms, you can group and sort the information you collect, respond to information, and view information by conversation so that responses to the form are grouped with the original form.
InfoPath	Dynamic, XML based forms that can contain common controls such as text boxes, check boxes, drop-down lists, and date pickers, as well as new controls such as repeating tables repeating sections, and optional sections. You can specify the data types allowed in the controls, as well as set data validation and conditional formatting. You can create different views of the form based on user and printing needs, enable multiple forms to be merged together, and design forms so that they can be submitted directly into a database or Web service. You can also create custom task panes, toolbars, dialog boxes, and menus for use when people fill out a form.

Creating forms in Microsoft Word

You can create electronic forms in many of the Office applications. But forms created in Word have a winning advantage over forms created in the other applications: a vastly larger number of potential users. Word is the most used office application, and might be the only application other than Solitaire that home users are comfortable with. If you're creating forms to email to a diverse group of users, Word is your best bet.

Fortunately, it's easy to create forms in Word. Here are the steps:

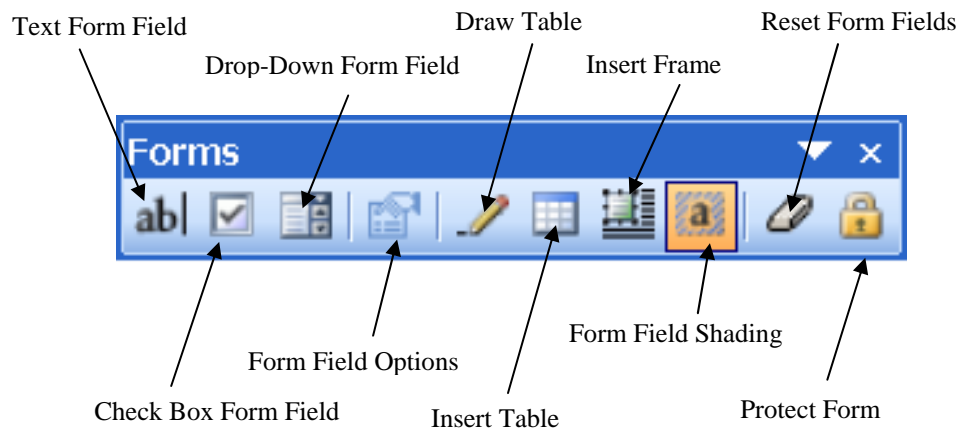
- Use tables to layout the form.
- Use borders and shading to create lines and boxes for users to enter information.
- Add form controls from the Form toolbar.
- Protect and lock the form.
- Distribute the form.

Some users assume you need Excel if your form includes formulas, but this isn't true. Word forms support basic calculations: Addition (including a SUM function), Subtraction, Multiplication, and Division. If your form must include complex formulas (for example, a form that estimates mortgage payments), use Excel. But for simple arithmetic, Word is sufficient.

Understanding the Word form controls

Choose View > Toolbars or right-click any toolbar to display the shortcut menu. Choose Forms to display the Forms toolbar.

Word's Forms toolbar



There are two sets of form controls in Word. While the Control Toolbox includes many additional control types, all the controls require Visual Basic to actually do anything. For this session, we'll limit ourselves to the Forms control set, which includes three form-field controls:

Name	Description	Example
Text Form Field	Text data: letters, numbers, dates	User name, birth date, account number, city
Check Box Form Field	Logical data	Any yes/no choice: "Call me" or "I am over the age of 18"
Drop-Down Form Field	A list of text choices	State names, credit card types

Using tables as your form's foundation

Tables have two roles in forms: layout and data entry areas. Use tables as you would when creating a Web page: to align form elements like text and images. Display and hide cell borders to create data entry areas in your form. Why use cell borders? Because the borders don't move, which isn't true of line objects (created with the Drawing tools) or underscores:

Name: Gini Courter
 Email: _____

If you're beginning with an existing form, start by analyzing the form to determine how many rows and columns are required to display the labels (text) and blanks needed in the form. Include a column for each column of data or labels, as well as extra columns to provide vertical spacing. For example, this section of the form will need 7 columns:

Date	[Spacer column]	Item	[Spacer column]	\$ Amount	[Spacer column]	GL Account 3
------	-----------------	------	-----------------	-----------	-----------------	--------------

1. Date
2. Spacer column
3. Item
4. Spacer column
5. \$ Amount
6. Space column
7. GL Account 3

Don't worry too much about the rows -- you can add rows easily later without messing up your form's layout. Some forms are easier to create as a series of tables. Analyze each section to determine the number of columns required before creating the tables.

Providing user clues with borders and shading

After creating the tables and adjusting columns (don't forget to use the Merge Cells and Split Cells features on the Table menu!) enter data in the appropriate cells. As an example, here's the table that provides the top section of our form. We've added borders and shading so you can see the blank rows and extra cells, inserted to provide space in the form. You need to decide how much the form should look like a table when it's printed/viewed on screen. Use the Borders and Shading toolbars to format the table.

Today's Date			Date Rec'd in Acct.	
Name/Payee				
<input type="checkbox"/> check if new address	Street Address			
	City	State	Zip Code	
Reason for Expense				

Adding form controls

Now it's time to add controls to the form. For text fields, click in the form where you want to position the form field then click the Text Box form field control on the Forms toolbar. Do the same for Check Box form fields and Drop-Down form fields.

Setting field properties

For each field, click on the field then click the Properties button, or double click the form field to open the Properties dialog box.

If the field will be used as part of a calculation, two things are important: first, set the type to Number or one of the Date types. Then, give the field a really good bookmark name. For example, in our form all the Expense Amount fields are named ExpN so we could easily use the names later when creating the formulas to calculate total expenses.

Adding calculated fields

For calculated fields, choose the Calculation type. In the Default Text text box, enter a formula using the bookmark names. For example, to add Exp1 and Exp2, enter the formula =Exp1+Exp2

The order of operations works here, so if a formula includes multiplication/division and addition/subtraction, use parentheses to indicate when addition/subtraction should occur before multiplication/division.

Enabling calculation

After adding the calculated fields, you'll need to set the properties for fields that should trigger a calculation. Open the Properties and enable the Calculate On Exit checkbox.

Locking your form

To lock the form, click the Protect Form button on the Forms toolbar. When the form is locked, users tab from field to field -- easy for them, easy for you. Lock the form, and then check the tab order.

Navigation tips

With complex forms, you might want to change the Tab order so that when you leave field **X**, the insertion point moves to field **J**. To do this, you must record a macro that goes to field **J**, then assign that macro as an action when exiting field **X**. Here are the steps to record the macro:

1. Make sure you know the name of the field you want to go to.
2. Choose Tools > Macro > Record New Macro.
3. Name the macro -- for example, GoToFieldJ.
4. Change the Save In location to the current document.
5. Choose Edit > GoTo from the menu.
6. Choose Bookmarks. Select field **J** from the list of Bookmarks.
7. Click OK to go to the field.
8. Click the Stop button to save the macro.

Now, open the properties for field **X**. In the Exit drop down, choose your macro. Click OK.

Distributing your form

If you created the form for your own use, save it as a template. Choose File > Save As and choose Template from the Save As Type drop down list. Word immediately switches to your templates folder so you can save the form as a template. When you choose File > New and select the template, Word opens a copy. If you created the form to email to others, save it as a regular Word document.

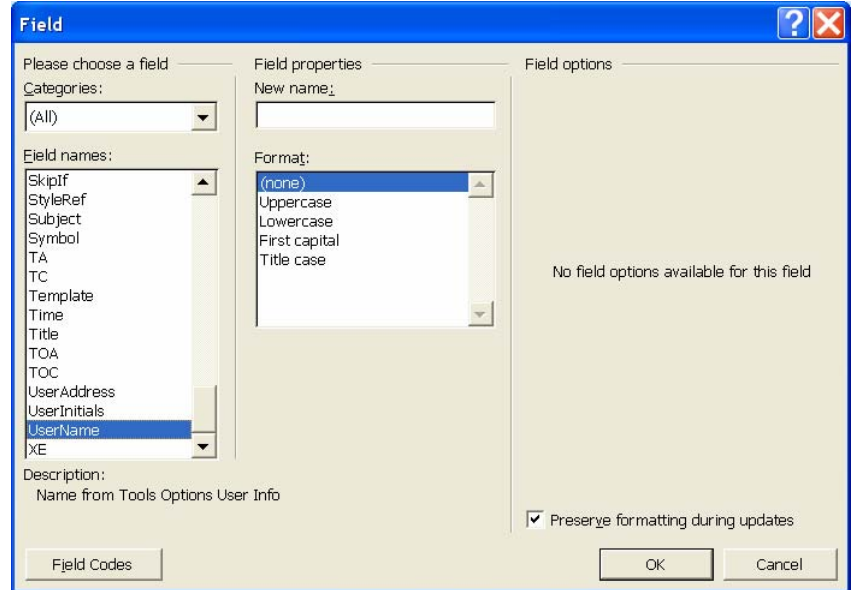
Other fields you can add to forms

A form can use any of the fields included in Word. For example, rather than making the user enter her name, you can insert the UserName field in the appropriate place in your document.

To add a Word field, position the insertion point and choose Insert > Field from the menu to open the Insert Field dialog box.

Scroll to the field you want to insert. Set formatting options (if any), then click OK to insert the field.

Press Alt+F9 to toggle between the field codes and results.

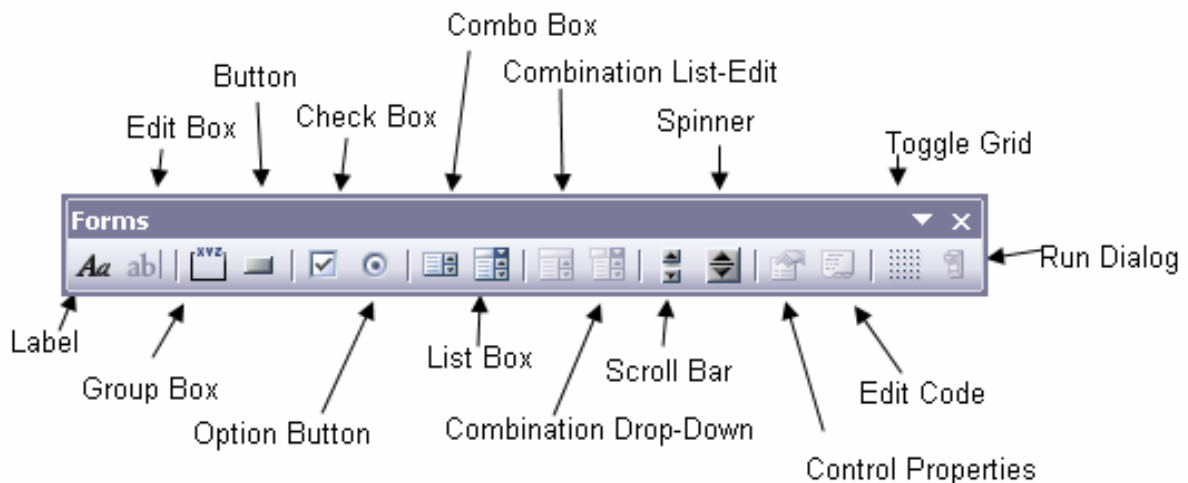


For information on creating forms using VB and the Control Toolbox, see this article:

http://msdn.microsoft.com/library/default.asp?url=/library/en-us/dnword2k2/html/odc_activex.asp

Excel forms

To create an Excel form, activate the Forms toolbar (View > Toolbars > Forms). The tools are similar to Words but include a couple of additional controls, such as Combination List-Edit.



To create a quick data entry form, click Data > Form.

Creating Adobe Acrobat PDF forms

Why PDF?

- Exchange nearly any type of document
- Password-protect and digitally sign a document
- Set options that prevent it from being copied, edited, or printed
- Insert hyperlinks and bookmarks for simpler navigation through large documents
- Nearly everyone has a program for viewing PDF files
- Adobe Systems has given out over 500 million copies of its free PDF reader, Adobe Reader.

PDF-maker software

- Adobe Acrobat Standard (\$299)
- Adobe Acrobat Professional (\$449)
- Adobe opened the source code so many products are now available.

Creating a PDF document

- It's as simple as printing!
- PDF makers install a printer driver on your computer.
- To create a PDF, choose the PDF maker as the printer and print the document.
- You are prompted to save the document to a file location.

Create online forms

1. Layout a form in Word using tables.
2. Print the form as a PDF.
3. Open the PDF in Acrobat.
4. Click the Form tool.
5. Drag a box where you want the form field to appear.
6. Enter the properties of the field.
7. Press Enter to create the field.
8. Press the Hand tool to switch out of Form view.

Form tips

- Turn on gridlines and snap before creating fields.
- View ➤ Grid and View ➤ Snap To Grid.
- To create rows of fields as in an expense report:
 1. Create the first row.

2. Hold Shift and drag a box around the row.
 3. Hold Ctrl and drag the selection box to the size you want and then click. The table fills with cells.
- Set tab order (Tools > Forms > Fields > Tab Order) by clicking the cells in order.

General Acrobat tips

- Get a good head start before attempting a cartwheel.
- Stick your tumbling runs to avoid deductions.
- Mount and dismount are not the same – know the difference!

(Just wanted to see if you were awake!)

More useful Acrobat tips

- Set Document Open Options to control how a form opens (File > Document Properties > Open Options).
- Set Document Security options to prevent readers from printing, copying or changing the document (File > Document Security and choose Acrobat Standard Security).

A new type of form: InfoPath Forms

What is InfoPath?

InfoPath is a new form creation tool that is part of the Microsoft Office System 2003, included in the Enterprise edition of Microsoft Office 2003. In InfoPath, you can do two things:

- **Design forms.** You can design and publish interactive, user-friendly forms in design mode. In addition to inserting text boxes and other standard controls into a form, InfoPath lets you insert controls that offer users the flexibility to add, remove, replace, or hide sections of a form. The forms you design can range from simple forms for collecting data to complex forms that are part of a larger business process. InfoPath forms can be used on their own, or you can design them to work with existing databases or Web services. Forms can be published to and accessed from a common location on a company network, such as a shared folder, a Web server, or a form library located on a Microsoft Windows® SharePoint™ Services site. To fill out forms, users must have InfoPath installed on their computer.
- **Fill out forms.** InfoPath users can fill out forms by using familiar document-like features. For example, they can check spelling inside fields, use the Format Painter tool to copy and paste formatting, or insert formatted text and graphics inside certain fields on the form. Depending on the form's design, users may also be able to merge data from multiple forms into a single form or export data to other programs. Users can also save forms to their computer, work on them offline, and then submit them to the corporate network when they are reconnected. This is especially useful for people who have intermittent or limited access to network resources, such as employees who travel frequently.

Based on XML

InfoPath is based on Extensible Markup Language (XML), a condensed form of Standard Generalized Markup Language (SGML) that enables developers to create customized tags that offer flexibility in organizing and presenting information. When you design a form, InfoPath creates an .xsn file, which is simply a cabinet (.cab) file containing standard XML files, such as XML Schema (XSD) that defines the structure of an XML document, and XSL Transformation (XSLT), a language that is used to transform XML documents into other types of documents, such as HTML or XML files. When a user fills out a form in InfoPath, the data in that form is saved or submitted as industry-standard XML. However, you don't need to know anything about XML in order to design or fill out an InfoPath form. The important point is that the form's XML format can make it much easier for an organization to repurpose data. For example, a single InfoPath trip report form can be used to provide XML data to a customer relationship management (CRM) system, a petty cash system, and a travel planning system.

Sample Microsoft InfoPath form

Employee Requisition Form	
Position Information	
Job title:	<input type="text"/>
Department:	<input type="text" value="Select..."/>
Contact person:	<input type="text"/> Ext.: <input type="text"/>
Salary Range:	<input type="text"/> Salary grade: <input type="text"/>
Position Type:	<input type="radio"/> New position <input type="radio"/> Replacement position
Status:	<input type="radio"/> Full-time <input type="radio"/> Part-time
Work schedule:	<input type="checkbox"/> Monday <input type="checkbox"/> Tuesday <input type="checkbox"/> Wednesday <input type="checkbox"/> Thursday <input type="checkbox"/> Friday
Hours:	<input type="text"/> Date Needed: <input type="text"/>
Recruitment Information	
Supervisor	
Last name:	<input type="text"/> First name: <input type="text"/>
Telephone:	<input type="text"/> E-mail address: <input type="text"/>
Summary of duties and responsibilities: <input type="text"/>	
Required skills, knowledge, abilities and competencies <input type="text"/>	
<input checked="" type="checkbox"/> Insert additional required skills, knowledge, abilities and competencies	
Additional preferred skills, knowledge, abilities and competencies <input type="text"/>	
<input checked="" type="checkbox"/> Insert additional preferred skills, knowledge, abilities, and competencies	
Required licenses, certifications, degrees or credentials <input type="text"/>	
<input checked="" type="checkbox"/> Insert additional licenses, certificaitions, degrees, or credentials	
<input type="button" value="Click here to attach documents"/>	
Approval	
This request is	
<input type="radio"/> Approved	
<input type="radio"/> Not approved	
Department Head Signature	Date
HR Tracking	
Job number:	<input type="text"/>
Title code:	<input type="text"/> Approved title: <input type="text"/>
No. of Applicants:	<input type="text"/> Date Filled: <input type="text"/>
Name of hire:	First Name: <input type="text"/> Last Name: <input type="text"/>

For materials and links from this session, visit our web site
www.triadconsulting.com/events/jaap.htm



© 2005 TRIAD Consulting, LLC. All rights reserved.

www.triadconsulting.com

P.O. BOX 930 - TRAVERSE CITY, MI 49685 OFFICE: 231.268.3613 - FAX: 866.534.6010 info@triadconsulting.com