

Acrobat Forms

Adobe Acrobat Pro 8.1.1. November 6, 2007

What is an Acrobat Form?

An Acrobat form is a printable form which is also digitally editable. By using a PDF form, you make it possible to author one document suitable for printing and electronic fill-out. If electronically filled out, Acrobat can aggregate the data and export it to a format suitable for Microsoft Excel – which can significantly eliminate manual data entry. PDF forms can also be digitally signed.

What is Adobe LiveCycle Designer?

LiveCycle Designer is the PDF form editor bundled with Acrobat. LiveCycle is heavily integrated with Acrobat and most form actions in Acrobat are actually handled by LiveCycle. When you use Acrobat to create a form, the actual form editing and saving are done by LiveCycle. Where applicable, this documentation refers to LiveCycle. At some points, you may need to save your document and close LiveCycle, and re-open the PDF in Acrobat.

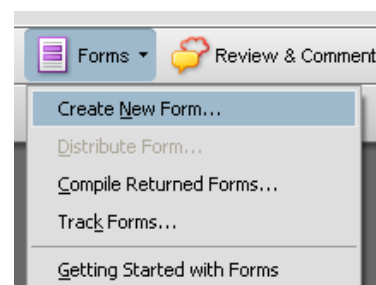
What is the Difference between LiveCycle and Acrobat?

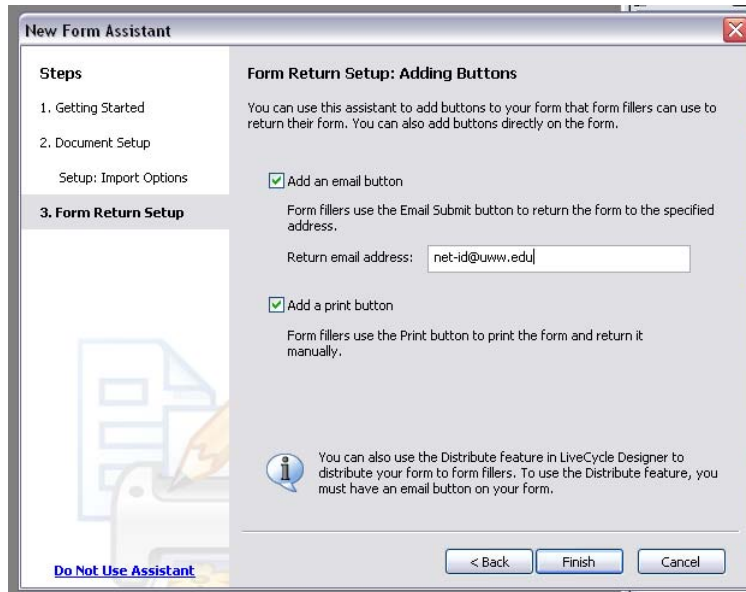
Acrobat, as a tool, focuses on collaboration, and PDF creation/optimization. LiveCycle is the form editor. It can take regular PDFs and turn them into interactive forms. LiveCycle is a part of the Acrobat Professional Package.

Converting from other File Types into a PDF Form

It is possible to convert an existing PDF into an Acrobat form, as well as Word and Excel files. LiveCycle will automatically attempt to detect form fields. If you try importing a Word or Excel file, the appropriate program will be opened and the conversion will be performed.

1. In Adobe Acrobat, click the **'Forms'** button and click **'Create New Form'**.
2. On the **'Create a New Form'** window, click **'Start with an electronic document'** and click **'Continue >'**.
3. The first step of the process is choosing which file to convert. Click **'Import a file from file system'** and click **'Browse'** to choose your file. Note, change **'Files of Type'** to choose Word or Excel files. By default, Acrobat looks for PDFs. If you have a PDF already open, you have the option to **'Use the current document'**.
4. If necessary, Acrobat will convert your document into a PDF. You can then choose to have Acrobat detect the form fields (**'Run Auto Field Detection'**) or you can insert the fields manually (**'Place Fields by Hand'**). Generally, it is best to use Auto Field Detection. Click **'Next'**.
5. Click **'Next'** and **'Done'**. You will then be asked about Form Returning. Click **'Add an email button'** to have data from the finished form emailed back to you. Click **'Add a print button'** to provide a print button for easy access on the PDF file.

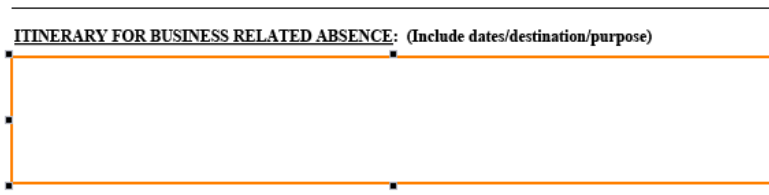




Working with Fields

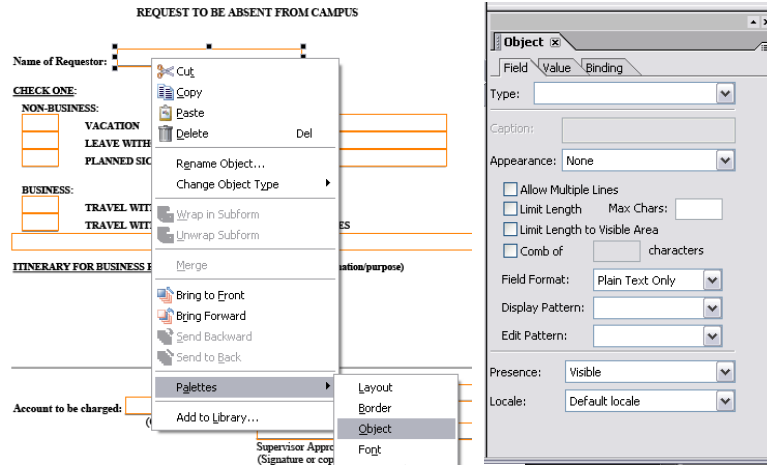
What is a Field?

A field is a place on the document which is intended to receive input from a user. A field is also something which a user can interact with. A field is denoted on the LiveCycle workspace by an orange box with black “handles” around it for resizing.



Modifying a Field Type

To change properties of a field, right-click on the field. You can change the object type (right-click > **Change Object Type**) or you can view the full attributes of the field by opening the **Object** panel. Right-click, then choose **Palettes** > **Object**.

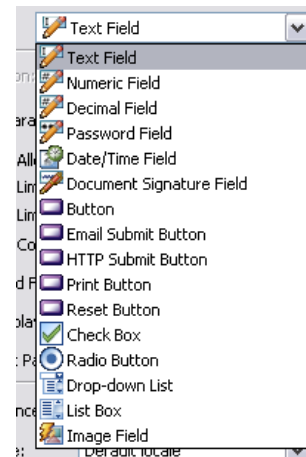


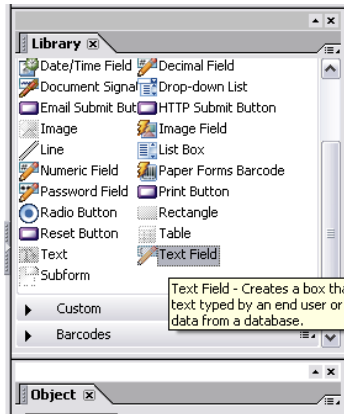
Moving and Resizing Fields

To move a field, click and drag the field to the intended location. To resize a field, click one of the black “handle” boxes and drag. If you are resizing a Text Field and wish to have multiple lines for entry, Make sure ‘**Allow Multiple Lines**’ is checked in the ‘**Object**’ panel, under the ‘**Field**’ tab.

Field Types

- **Text Field** – Enter any text with a keyboard
- **Numeric Field** – Any number-type entry, such as a regular number, phone number or social security number.
- **Decimal Field** – Same as numeric, but with a higher decimal precision. Default is unlimited.
- **Password Field** – Same as text, but shows asterisks (*) to protect passwords.
- **Date/Time Field** – Same as Text, but can be formatted specifically for dates or times. When using a date, a calendar is provided for easy date entry.
- **Document Signature Field** – Allows user of the form to attach a digital ID.
- **Button, Email Submit Button, etc** – generic and specialized buttons to perform specific actions. Attach JavaScript to the buttons to manipulate the form.
- **Check Box Field** – Provide a Yes/No-type control. When checked, a user specifies ‘Yes’ (True). Unchecked is ‘No’ (False).
- **Radio Button** – same as Check Box, but used for a series of choices
- **Drop-down list** – Provide a list of choices. Only one option shown at a time
- **List Box** – Same as Drop-down list, but more than one option is shown.
- **Image Field** – Allow user to attach or insert a picture into the form.





Inserting a Field

To insert a field, drag a field from the 'Library'. Open the 'Standard' Palette to see the field types listed above.

Deleting a Field

To delete a field, click the field on the page. Then right-click and choose 'Delete', or press the Delete key on your keyboard.

Renaming a Field

The name of the field is used when aggregating data. So it is important that field names reflect the value the user is entering. Click the field in the PDF, then in the 'Object' panel, click 'Binding'. Change the 'Name' of the field to an appropriate value.

Good names: EstMeals, registration_cost.

Bad names: This is a very long form name, A lot of different things, form 10.

Automatically Formatting Input

For Text, Numeric, Decimal and Date/Time fields, you can specify special formatting. If a user does not enter information into a field using the given format, an error is displayed.

Forcing a Field to Auto-format

1. Click the field you wish to format
2. In the Object Panel, on the 'Field' tab, pull down 'Display Pattern'. Set the display pattern to the appropriate format.
3. Change to the 'Value' tab and click the checkbox next to 'Validation pattern Message'. Enter a message that the user will see if their input does not appropriately reflect what should be entered. Uncheck 'Validation Script Message'.
4. On the 'Binding' tab, make sure 'Data Pattern' is set to the same as 'Display Pattern' on the 'Field' tab.

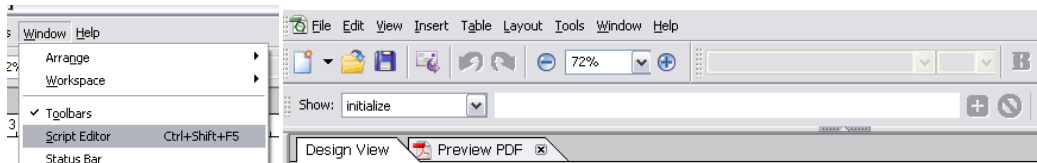
Common Formatting Codes

- **MM/DD/YYYY** – force the user to input a date in two-digit month, followed by two-digit day, followed by 4-digit year, separated by forward slashes (/).
- **999-99-9999** – Social Security numbers

Calculating a Field

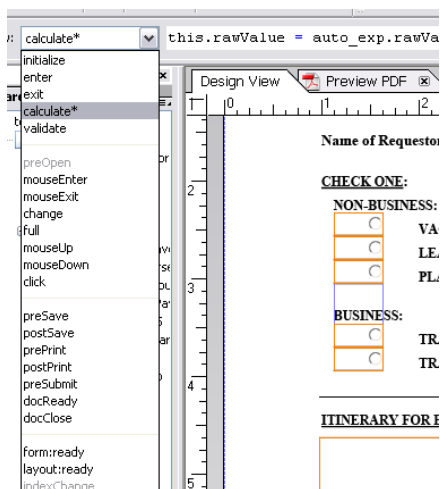
Adobe LiveCycle allows you to use JavaScript and form events to automatically calculate form values. The format of the code is somewhat related to Microsoft Excel's formula system. You can specify specific fields. Functions are available. Unlike Excel, you can specify calculation on actions the user takes.

Formulas are entered using the Script editor. To show the Script Editor, click the 'Window' menu and choose 'Script Editor'. You can also press **CTRL + SHIFT + F5** on your keyboard.



Form Events

When a user interacts with a PDF form, that interaction is called an event. It is possible to make the Adobe PDF do something (such as calculate a form field, submit document information, add form fields, show or hide parts of the PDF, etc.) it is common to add JavaScript to the 'calculate' event. For a complete list and explanation of the various events in LiveCycle Designer, see the Acrobat help.



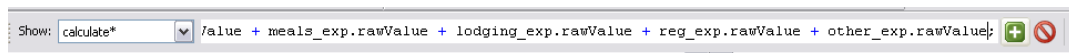
It is important to understand that events, for the most part, belong to form fields. Users interact with form fields. So JavaScript must be added to an event for a form field.

It is a general practice for developers ("programmers") to use as few events and as little code as possible. When considering what to do with forms, take the easiest, cleanest, least complex route.

For example, if you wanted to total 5 fields together, you would add an event to the total field to do the addition, and not to each field to be added. It is easier to code, easier to debug if something goes wrong, and it keeps code in one place.

Calculating a Total When a Field is Changed

1. Click the field you wish to display the total in
2. Make sure the default value and Display Pattern are set.
3. On the 'Value' tab of the 'Object' panel, set 'Type:' to 'Calculated – Read Only'.
4. In the Script Editor, by 'Show:' choose 'Calculate'. The Calculate event is what will be triggered to re-calculate the total.
5. To the right of 'Calculate' enter the equation to total. For example, to enter two numeric fields named "Field1" and "Field2" together, enter: `this.rawValue = Field1.rawValue + Field2.rawValue;`
6. Click the green plus sign to the right of the Script Editor to accept the code.



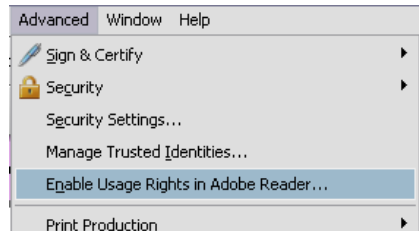
If an event (in this picture, the 'calculate' event) has code attached to it, you'll see an asterisk (*) by it.

Giving Reader Users the Rights to Fill-in Forms

Once a form is created, if you want users of the free Adobe Reader to be able to edit the form, do the following:

1. If you have not done so, save your PDF and exist LiveCycle.

2. Open Acrobat and open the PDF form.
3. In Acrobat, in the **'Advanced'** menu, choose **'Enable Usage Rights in Adobe Reader'**.
4. In the window that appears, click **'Save Now'**. **IMPORTANT: SAVE THE PDF AS A NEW DOCUMENT.** Distribute the new version of the PDF to the end users. Keep the original version for editing.

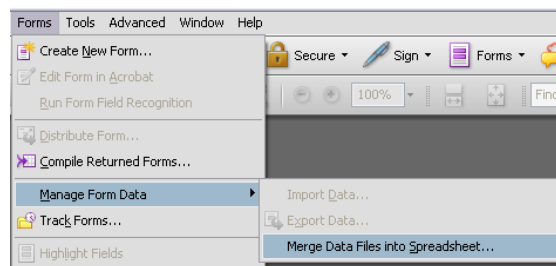


Receiving Data

When users press the automatically inserted 'E-Mail' button, the user is presented with an email with an attached 'XML' file. All users need to do is click **'Send'**. The data will be sent to whoever was specified when the PDF form was being created.

When you receive the data, save each XML file to a folder on your computer. Once you've received all data, use Acrobat to convert the data to a CSV file.

1. In Acrobat, click the **'Forms'** menu > **'Manage Form Data'** > **'Merge Data Files into Spreadsheet'**.
2. In the **'Export Data...'** window, click **'Add Files'**. And choose the XML files which you've saved.
3. Click the **'Export'** button.
4. Name and save the file.



Viewing an Submission

1. Open the PDF for the Form you wish to view
2. In the **'Forms'** menu, choose **'Manage Form Data'** > **'Import Data'**.
3. Choose the XML file associated with the submission you wish to view.

The data from that submission will then be loaded into the originating form.

For Further Assistance

If you have questions about how to use these features or would like further consultation, contact the LTC (lrc@uww.edu).