

Acrobat Forms

Introduction



CALIFORNIA STATE UNIVERSITY, SACRAMENTO

WORKSHOP DESCRIPTION.....	1
Overview	1
Prerequisites	1
Objectives	1
INTRODUCTION TO PDF FORMS	2
Overview	2
ACROBAT FORMS VS. LIVECYCLE	2
PDF FORMS (USING ACROBAT)	3
Acrobat Forms Process	3
1. Create	3
Convert to PDF	4
2. Detect	4
3. Review	5
Acrobat Form-Editing Interface (“Viewer mode”)	5
Testing your Form	7
4. Fix	6
5. Deploy	7
6. Data	8
Email	8
Web (or other electronic delivery method)	9
Adobe Acrobat Forms NOTES	9
PDF FORMS (USING LIVECYCLE DESIGNER)	10
LiveCycle Designer Forms Process	10
1. Create	10
Importing an Existing Document (form)	11
Creating a Form in LiveCycle Designer	11
The Live Cycle Designer Interface	12
2. Test	13
3. Fix	14
4. Deploy	14
LiveCycle Designer Forms NOTES	15
ACROBAT & LIVECYCLE DESIGNER RESOURCES	16
PDF Accessibility	16
General	16

RESOURCES.....17

Faculty / Staff Resource Center	17
Training & Tools eNewsletter	17
Getting Help	17
Campus Resources	17

WORKSHOP DESCRIPTION

Overview

PDF forms can be created in one of two different ways: 1) Adobe Acrobat (9 Standard, Professional, or Extended), and 2) Adobe LiveCycle Designer. For basic forms, Acrobat should be sufficient; more complicated or advanced forms are best created using LiveCycle. During the course of this workshop, you will be introduced to essential form-editing tools available to you in Adobe Acrobat and in LiveCycle Designer.

Prerequisites

Individuals taking this workshop should have basic computer skills and the ability to effectively work in the Windows or Macintosh OS environment. Participants should be familiar with the Adobe Acrobat environment, and should be comfortable navigating the interface.

Objectives

Participants attending this workshop will:

- Understand the differences between Acrobat forms and LiveCycle Designer forms.
- Attain a basic understanding of the process of forms creation using Adobe Acrobat or LiveCycle Designer.
- Learn how to work with basic form elements (text boxes, text fields, radio buttons, selection lists).
- Learn how to create *accessible* PDF forms.
- Learn how to process PDF form data.



ACCESSIBILITY : PDF *accessibility* is mentioned throughout this handout. Accessibility in terms of electronic documents (in particular, documents provided for a general audience on the Web) generally refers to facilitating the use of technology for people with disabilities. Providing equivalent access to electronic documents for all faculty, staff and students across the CSU system is required by SB302. This Senate Bill extends the requirements of Section 508 of the federal Rehabilitation Act to the California State University. To learn more about accessibility requirements for Sac State, refer to [Sac State's Accessibility Web site](http://www.csus.edu/accessibility/) (<http://www.csus.edu/accessibility/>).

Before you start, it would be beneficial to review PDF forms accessibility requirements as described in the ATCS handout [Creating Accessible PDFs](http://www.csus.edu/training/handouts/workshops/creating_accessible_pdfs.pdf) (http://www.csus.edu/training/handouts/workshops/creating_accessible_pdfs.pdf)

INTRODUCTION TO PDF FORMS

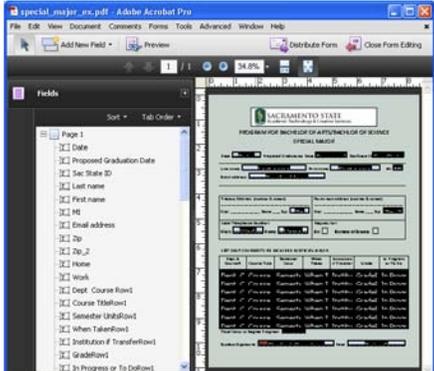
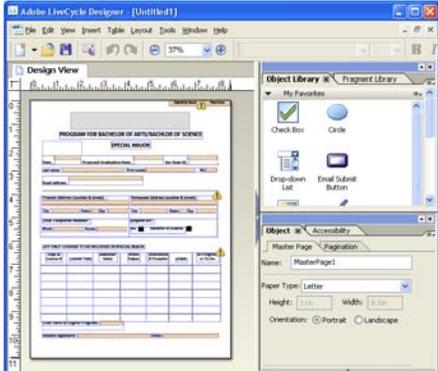
Overview

PDF Forms can be created using one of two methods: **Adobe Acrobat** (Acrobat Professional or Acrobat 9 Standard, Professional, or Extended) or **Adobe LiveCycle Designer** (comes packaged with version 7 and higher of Acrobat Professional). Review the next section that lists the pros and cons of both methods and decide what you're going to use (the list is certainly not exhaustive). You might also check out both methods, and then make a decision based on your experience.



Before you begin, using either method, it might be beneficial if you reviewed a few ATCS handouts: [Adobe Acrobat: Intro to PDFs](http://www.csus.edu/training/handouts/workshops/intro_to_acrobat.pdf) (http://www.csus.edu/training/handouts/workshops/intro_to_acrobat.pdf) and [Adobe Acrobat: Creating Accessible PDFs](http://www.csus.edu/training/handouts/workshops/creating_accessible_pdfs.pdf) (http://www.csus.edu/training/handouts/workshops/creating_accessible_pdfs.pdf). Both handouts cover items that would be useful to you in the development of PDF forms. Other PDF forms resources are listed at the end of this handout.

ACROBAT FORMS VS. LIVECYCLE

Acrobat Forms	LiveCycle
<p>PROS</p> <ul style="list-style-type: none">Fairly easy to usePC and Mac compatible <p>CONS</p> <ul style="list-style-type: none">Complex forms (esp. those containing calculations and javascript) are more difficult to create using Acrobat	<p>PROS</p> <ul style="list-style-type: none">Complex forms can be created more easily using LiveCycleAccessibility features are easier to add <p>CONS</p> <ul style="list-style-type: none">More difficult to learnPC compatible onlyForms cannot be edited using Acrobat
	

actual form elements, such as fillable textboxes.

Convert to PDF

After creating your document, you'll need to convert it to PDF format. If you are using a Windows computer, and have Acrobat installed, you can skip this step (move on to “Detect”). Adobe Acrobat for Windows can create your PDF document and “detect” form fields in one step. If you're using a Mac computer, this feature is not available, so you will need to convert your form to PDF before moving on to Acrobat (“the Detect” stage).

To convert to PDF, if on Windows, use PDFMaker, which is represented as an Acrobat icon in Office applications. In Office 2007, this icon is located under the Acrobat tab. Using PDFMaker will ensure that the structure of your document is included in the PDF, which aids in meeting accessibility requirements. If you cannot use PDFMaker, or are using a Mac, you will need to create your PDF from the Print menu. For assistance, refer to the [ATCS handout on Adobe Acrobat](http://www.csus.edu/training/handouts/workshops/intro_to_acrobat.pdf) (http://www.csus.edu/training/handouts/workshops/intro_to_acrobat.pdf).



The capability to create a PDF is available if you have Adobe Acrobat installed. The Macintosh operating system (version 10+) has this capability built-in, but use the Acrobat PDF creation option if possible, as Mac-created PDFs tend to be larger in filesize.

2. Detect

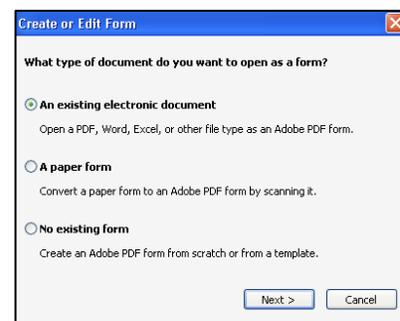
Acrobat can be used to manually draw out form fields or to automatically recognize form fields. It's usually more expeditious to run the form field “auto-detect” feature, and then remove extra fields or add fields missed by Acrobat.



When the auto-detect feature in Acrobat is run, the program does its best to recognize elements in a document that might be form elements. The program will then place a form field on that element, to allow for interactivity (i.e. to make the form “fillable”). The way you *created* the form elements will affect Acrobat's ability to auto-recognize fields. You might find, for example, that Acrobat recognizes Word *lines* as form elements, but does not recognize *underlines* as such. Adjust your design methods accordingly, to take advantage of Acrobat's auto-detect feature.

To use the auto-detect feature in Acrobat,

- step 1.** In Acrobat, click **Forms > Start Form Wizard.**
- step 2.** Select **An existing electronic document (PC)** or **Start with a PDF Document (Mac)**
- step 3.** Click **Next**, then locate the file you want to use.



step 4. Click **Next** to start the auto-detection process (if the document is not already in PDF format, it will also be converted).

step 5. When finished, the PDF will open in Acrobat.

Figure 4: Creating a PDF form using Acrobat's auto-detect feature.

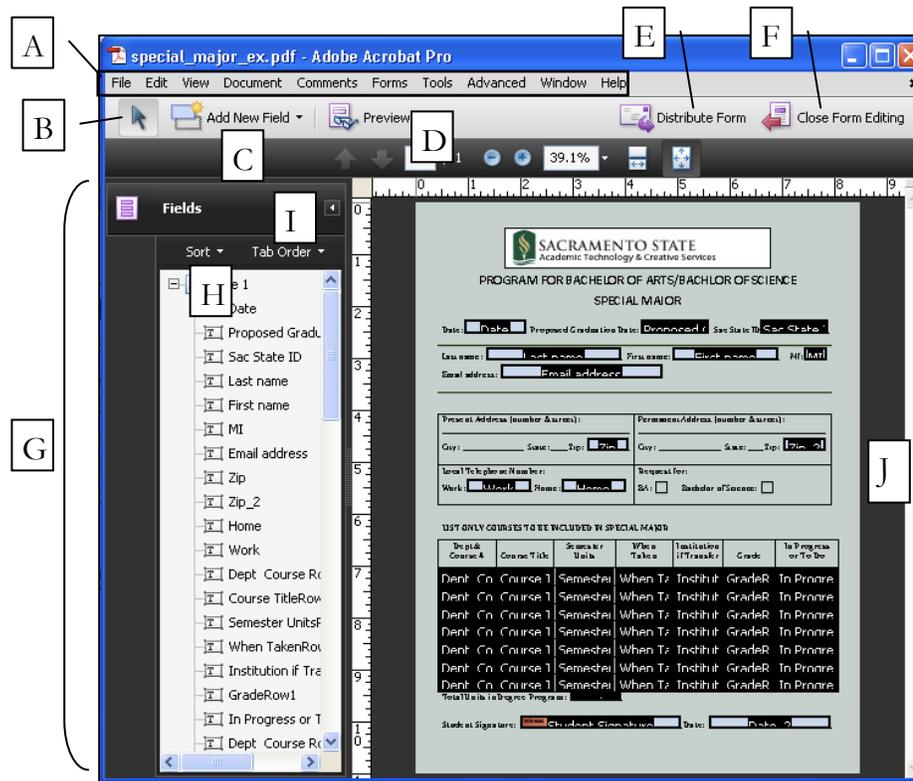
3. Review

After Acrobat has placed form fields on your PDF, you'll need to review the document to ensure that fields have been placed properly. Extra fields will need to be deleted, and new ones added. Field *names* will also need to be edited. These fixes will be done in the next step of the process, but it is during the review stage that you'll make note of changes that need to be made. Upon auto-placement of form fields, your PDF will open directly in Acrobat's form editor. The form editor is explained in more detail below.

Review

- View form fields
- Note changes that need to be made

Acrobat Form-Editing Interface (“Viewer mode”)



- A. **Menu bar:** Same menu bar that appears in the regular Acrobat interface, but some options are not available
- B. **Select Object** tool
- C. **Add New Field** menu: Used to manually add form field elements, such as textboxes, radio buttons, checkboxes, buttons, etc (8 different form tools).
- D. **Preview** button: Used to preview your form. While in preview mode, you cannot edit your form.

- E. **Distribute Form** button. This is used to access the Distribute Form wizard. Select your choice of delivery using this option (email or manual [Web]). The Distribute option will create a *Response file*, which is covered in the “data” stage.
- F. **Close Form Editing** button: Returns you to the regular Acrobat interface (out of form-editing mode).
- G. **Fields panel**: Displays fields that are included on your form.
- H. **Sort** pull-down menu: Fields can be sorted alphabetically or by tab order (default).
- I. **Tab Order** pull-down menu: Lists several different options for setting the tab order of a form (see the “fix” stage).
- J. **Document** pane: Your form appears here in form-editing mode.

4. Fix

Preparing your PDF form for final delivery involves a few steps:

Fix

- Delete/add fields; tab order; buttons
- Reader usage rights; re-save form

1. Delete extra fields that were placed during the auto-detect process
To delete fields, use the **Select Object** tool. Click on a form element and hit the Delete button on your keyboard.
2. Add fields that are missing
Add fields by using the **Add New Field** button. Either double-click on your form or draw out the field to place it. Be sure to give your field a *Name* and a *Tooltip*. The **name** should be lowercase, short, and not contain spaces. The **tooltip** should be give information about filling out the field (for accessibility purposes).
3. Rename/enter field names and tooltips
As you create new fields, give them appropriate names and tooltips. Fields that were automatically placed by Acrobat should be re-named appropriately. To re-name a field, double-click the field using the **Select Object** tool.
4. Fix the tab order of your form, if needed
View your form fields by tab order from the **Fields** panel. To do this, use the **Tab-Order** pull-down menu. If the order is incorrect, drag and drop your fields to the correct location in the **Fields** panel. You can test your tab order by previewing your form, and tabbing through to each element.
5. Add a submit button (and a reset button if you want)
Use the button form tool to draw out a button.
 - a. Select the **Button** tool using the **Add New Field** button.

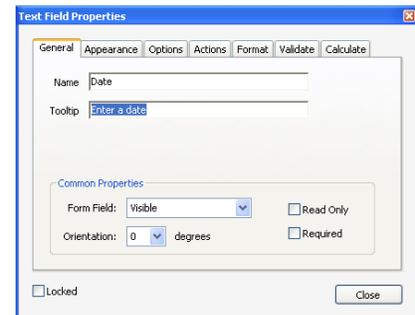
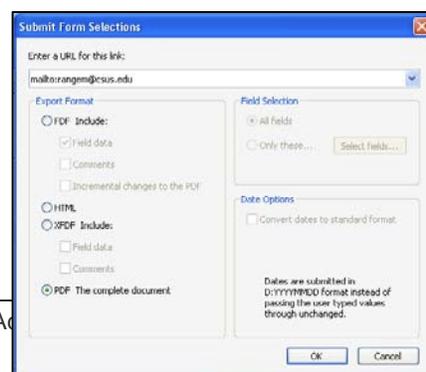


Figure 5: Give form elements appropriate names and tooltips.



- b. Give your button an appropriate name (“submit”) and tooltip (“Submit button”).
 - c. From the button properties window, edit your button label/color using the Appearance and Options tab.
 - d. From the **Actions** menu,
 - i. Select **Submit a form** (next to **Select Action**), then click **Add**
 - ii. Enter your email address (**Enter a URL for this link**)
 - iii. Select **PDF The complete document**, then click **OK**
 - iv. Click **Close**.
6. Enable Reader usage rights (to save form data)
 To do this, first exit Form-editing mode by clicking the **Close Form Editing** button. Next, click the **Advanced** menu in Acrobat, then **Extend Features in Acrobat Reader**. Click **Save Now**.
7. Complete a final “Save-As” to completely replace your form
 A complete “Save As” will help to reduce the final file size of your form.

Figure 6: Form button ACTION: enter email address after mailto;; then select "PDF The complete document".

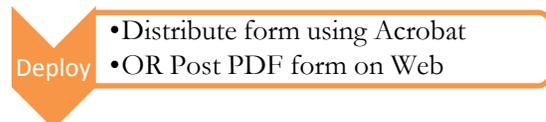
Testing your Form

Fill out your form as you intend for your audience to do. Make note of any changes that are needed. Some questions you might ask yourself:

- Is the tab order correct?
- Is it clear what you need users to type in the form?
- What about accessibility? Would someone who is blind, using special software, be able to submit your form correctly? If you have doubts, it might be prudent to contact the Sac State [SSWD office](http://www.csus.edu/SSWD/) (<http://www.csus.edu/SSWD/>), in order to have someone test your form for accessibility. You can also review PDF form accessibility using the ATCS handout [Creating Accessible PDFs](http://www.csus.edu/training/handouts/workshops/creating_accessible_pdfs.pdf) (http://www.csus.edu/training/handouts/workshops/creating_accessible_pdfs.pdf).
- Possibly submit your form, to test your method of delivery/submission.

5. Deploy

PDF forms can be distributed via email, via the Web, or by simply handing it over (electronically).



To distribute your form via *email*, take advantage of Acrobat’s Distribute Form wizard. Using the wizard will ensure a seamless method for delivering *and* gathering form data. To use this feature in order to distribute your form via email,

step 1. Click the **Distribute Form** button in form-editing mode, or from the **Forms** menu in Acrobat.

- step 2.* Select the option to **Manually collect responses in my email inbox**, then click **Next**.
- step 3.* Select **Send it automatically using Adobe Acrobat**, then click **Next**.
- step 4.* Enter your name and email address on the next screen, then click **Next**.
- step 5.* Enter email address for recipients (separated by semicolons), into the **To** box.
- step 6.* Click **Send**. The email program on your computer will partially engage & the message will be sent (if asked to enter your email password, do so). The Acrobat **Tracker** will appear. Information regarding form distributions, recipients, and responses will be displayed (screenshot at right).

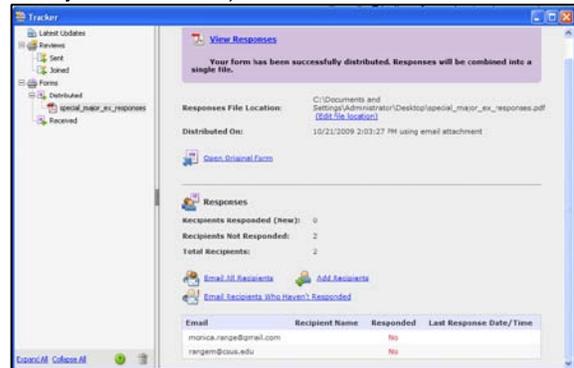


Figure 7: Form Tracker. Info about distributed forms, recipients, and responses is displayed.

If distributing your form on the Web (or to simply give it to someone), all that is required is the PDF form. Provide a link to your form on the Web page of your choice. It is, however, recommended that you provide additional information to your users, along with your form, as displayed in the screenshot to the right.

Workshop Request Form (sample online form, PDF format)
The form above is a PDF form. Fill it out and click the **Submit** button.

- When you click the **Submit** button, you will be prompted to select an email option. If you have an email program installed on your computer, use the default option (Outlook, Eudora, Entourage); otherwise, use the Internet Email option, and follow the instructions.
- If using an **email program** on your computer, a new message will be created that includes the form you filled out as an attachment. Send the message (don't worry about who it's being sent to, nor about including text in the message).
- Mac users**, make sure that you open this PDF form in Adobe Reader (not Mac PDF viewer - the Submit button won't work). You may need to download the form to your computer first.
- NOTE: Adobe Reader 8 or higher is required in order to submit this form.** The current version of Reader can be downloaded free from the Adobe site.

6. Data

PDF form data can be gathered in a few different ways, depending on the method that was used to distribute the form.

Data

- Gather forms (data) as received
- Compile results using Acrobat

Email

PDF form data is easily compiled and viewed if you've distributed your form via email using the Acrobat **Form Distribution** wizard (as described in the last section).

Upon receiving responses, double-clicking (or opening) the file will add the completed form and data to a special *response* file created by Acrobat, for the express purpose of collecting data. This special response file is displayed as an Acrobat *portfolio* (version 9), or as a *PDF package* (version 8). Data from a response file can be *exported* to a spreadsheet by using the

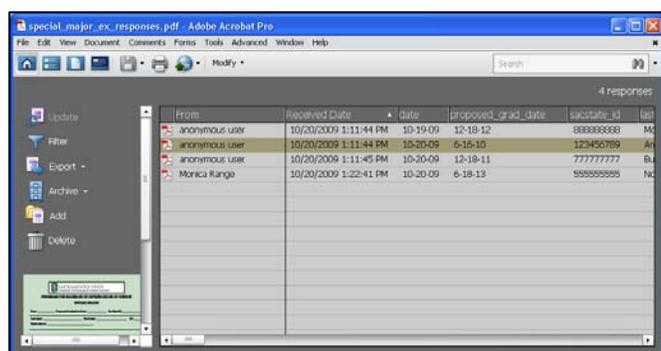
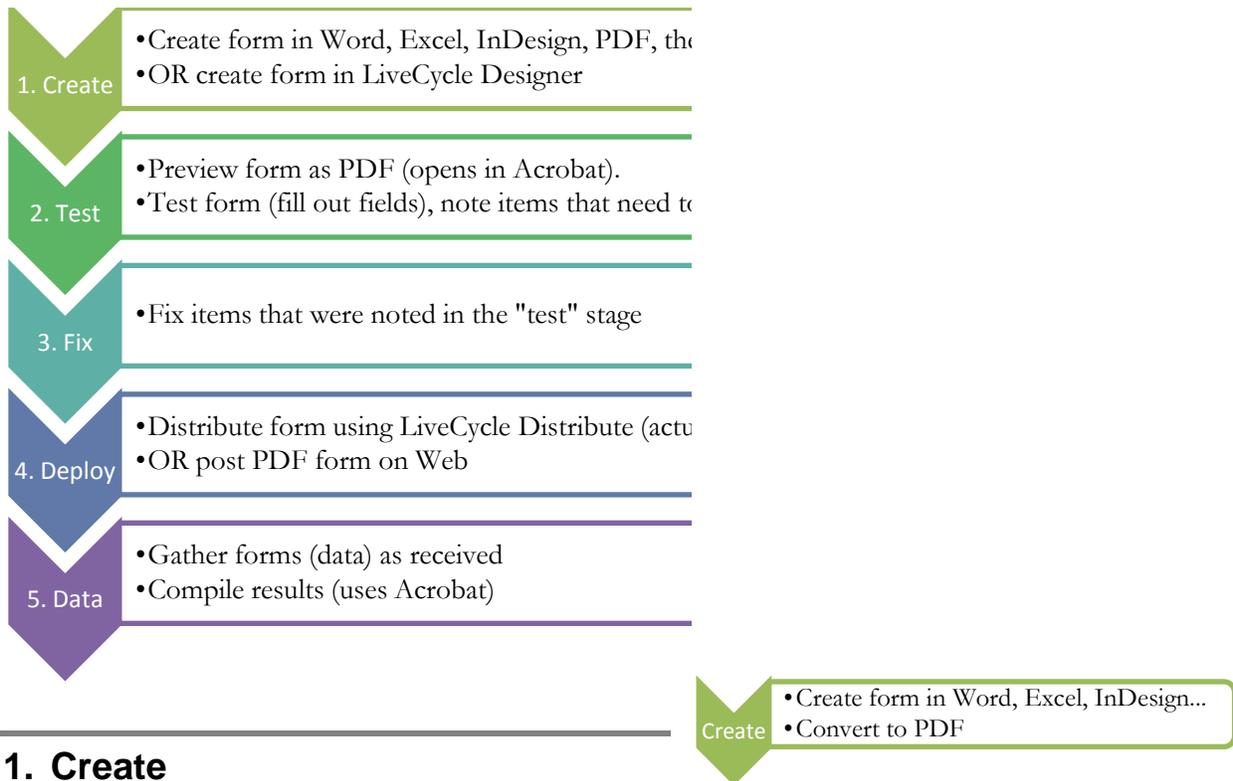


Figure 8: PDF form responses are gathered in a special PDF portfolio called a "response file".

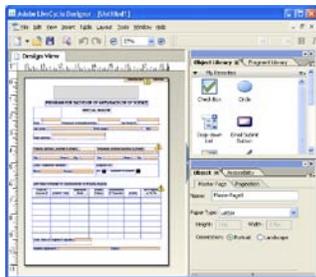
PDF FORMS (USING LIVECYCLE DESIGNER)

Like Acrobat, LiveCycle Designer can be used to create PDF forms. The program is specifically designed for the development of forms. These forms can either be imported from another program, or designed directly (from scratch), in LiveCycle Designer.

LiveCycle Designer Forms Process



1. Create



Forms in LiveCycle Designer can be designed in another application, such as Microsoft Word or InDesign, and then imported to LiveCycle. Forms can also be designed exclusively in LiveCycle Designer.

LiveCycle Designer can be a difficult program to learn, but it does a good job of importing Microsoft Word documents. If you're more comfortable using Word, use Word to design your forms, then use LiveCycle Designer to deploy them as PDF forms. LiveCycle will also import other filetypes (including PDF files), so if your form exists in another format, you can still import it into LiveCycle, add or update necessary form fields, and then easily deploy it.

As you are designing your form, save the form frequently. It is recommended that you save your form in LiveCycle Designer format, while in the design phase. To do this, click **File > Save As**, select **XDP** from the **Save as type** drop-down menu, then click **Save**.

Importing an Existing Document (form)

- **Microsoft Word:** If your form has been designed in Word, note that LiveCycle will automatically place form fields as it imports the document, even though you may not have actual Word form fields placed (like textboxes and radio buttons). The accuracy of the automatic form field placement depends on how you have designed elements on your document. Table cells may not be recognized as form elements, whereas lines will. If you have created an actual *fillable* Word form, the conversion to a LiveCycle form is very accurate. The program will convert all Word form elements to LiveCycle form elements.
- **PDF form:** If you have created or started an Acrobat PDF form, you can import it into LiveCycle. LiveCycle will convert all of your form fields to LiveCycle form fields. You will not be able to edit the form fields in Acrobat, after this import has taken place.

To import an existing document (or form) into LiveCycle Designer,

- step 1.* In LiveCycle, select **File > New** from the menu bar. The **New Form Assistant** will appear.
- step 2.* Select one of the three options to import from the list (**Based on a spreadsheet**, **Import a PDF document**, or **Import a Word document**).
- step 3.* If importing a PDF or Word document, you will be prompted to select a file from your computer. If starting from a spreadsheet, you will be prompted to select your form size, and then copy cells to import from your spreadsheet. Continue to follow the prompts until your file is imported. Depending on the complexity of your document, this may take a few minutes.
- step 4.* After the import has completed, **Save** your file, then create or edit the form fields.

Creating a Form in LiveCycle Designer

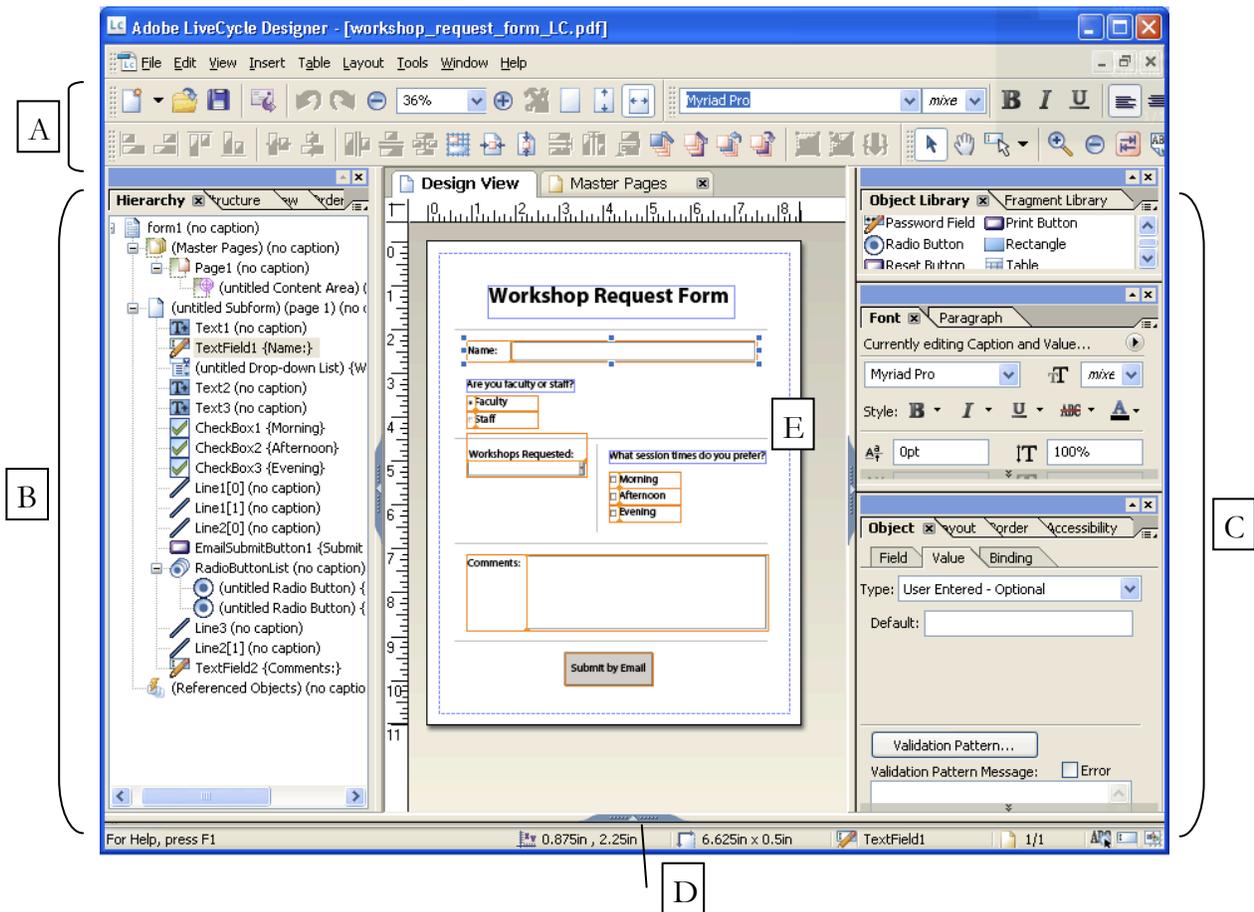
Form can be created from scratch in LiveCycle, or from one of the many templates available in the program. To create a form in LiveCycle, click **File > New** in the menu bar, and then select **Use Blank Form** or **Based on a template**. After going through the process, you will be able to add text, images, graphical elements (such as lines), and form fields to your form.

One of the biggest hurdles to using this program is knowing where your tools are. In the next section, we'll cover the program interface, and will give you suggestions as to what tools and palettes to include (tools that are essential to building forms in LiveCycle).

Adding form fields is most easily done from the **Object Library** (palette area on the right – see screenshot in next section). The Object Library is made up of four sections – **My Favorites**,

Standard, Custom, and Barcodes. Start with **My Favorites**. If you don't find what you need there, choose from the **Standard** section. To add elements, simply drag them out of the Object Library onto your form. Resize the element to your specifications. Some fields will “auto-fit” to your content. Each form element should be given an appropriate name (**Object > Binding** palette) and tooltip (**Accessibility** palette).

The Live Cycle Designer Interface



- A. **Toolbar Well:** This area can be customized by clicking **Tools > Customize** from the menu bar. For basic forms, **Standard, Text Formatting, Layout, and Tools** are good toolbars to have. These toolbars can be further customized by selected the **Commands** tab from the **Customize [Tools]** window. Tools can be added and removed from toolbars by dragging/dropping back and forth between the Commands tab and the respective toolbar.
- B. **Palette Area (left):** The Hierarchy palette, in addition to the PDF Structure, Data View, and Tab Order palettes all reside in this area. At the least, open the Hierarchy palette,

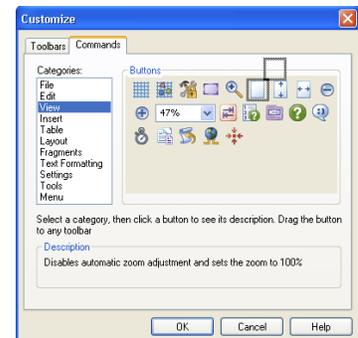


Figure 9: The Customize window. Tools can be added to toolbars from the Commands tab (drag & drop).

which will allow you to more easily select/edit form fields (select the fields from the Hierarchy palette). The Tab Order palette is another important palette to have open as you can use it to adjust the tab order of your form fields. To add palettes to this area, click the **Window** menu option, then select a palette.

C. **Palette Area** (right): At the least, you'll want to dock (open) the Object Library, Object, Font, Paragraph, and Report palettes. These can be opened by clicking on the **Window** menu option, and then by selecting the respective palette.

D. **Report Palette**: The Report palette is the only palette that is docked at the bottom of the LiveCycle screen. Expand or collapse it by clicking on the arrow. It can be docked (or opened) from the **Window** menu.

E. **Layout Editor**: This is the area used to design or layout your form. Several tabs, or "Views" are available in this area. By default, the Design View and PDF Preview tabs are available. If the Master View tab is not available, add it from the **View** menu.

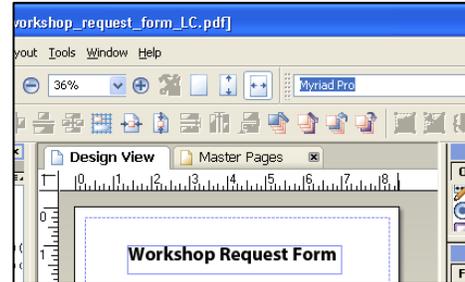
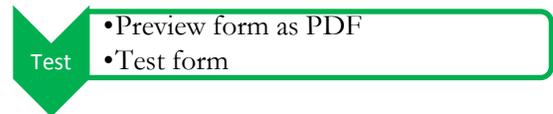


Figure 10: Layout Editor - the Design View and Master Pages Views are currently available in this document.

2. Test

After you have finished designing your form, it is imperative that you test your work, as a PDF form.



To do this, simply activate the **Preview PDF** tab from the Layout Editor (above your document,

but below the LiveCycle toolbar area (see screenshot at right). If the Preview PDF tab is not visible, activate it from the **Window** menu in

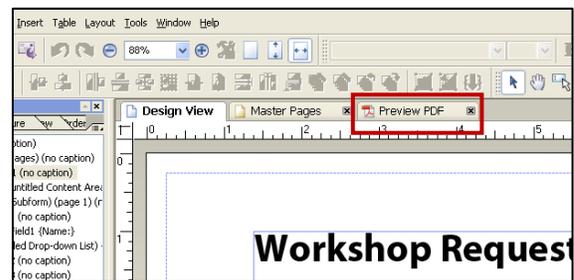


Figure 11: The Preview PDF tab

LiveCycle. When you click on the Preview PDF tab, your form will be opened in Acrobat. Fill out your form as you intend for your audience to do. Make note of any changes that are needed. Some questions you might ask yourself:

- Is the tab order correct?
- Is it clear what you need users to type in the form?
- What about accessibility? Would someone who is blind, using screen-reader software, be able to submit your form correctly? If you have doubts, it might be prudent to contact the Sac State [SSWD office](http://www.csus.edu/SSWD/) (<http://www.csus.edu/SSWD/>), in order to have someone test your form for accessibility. You can also review PDF form accessibility using the ATCS handout [Creating Accessible PDFs](http://www.csus.edu/training/handouts/workshops/creating_accessible_pdfs.pdf) (http://www.csus.edu/training/handouts/workshops/creating_accessible_pdfs.pdf).
- Possibly submit your form, to test your method of delivery/submission.

3. Fix

Preparing your PDF form for final delivery involves adjusting your form to fix any problems you encountered in the testing stage. In particular,

Fix

- Fix items that were noted in testing

1. Re-label or move any fields that need to be changed

Also be sure that each element has an appropriate name (**Object > Binding** palette) and tooltip (**Accessibility** palette).

2. Adjust the alignment of fields that need to be realigned

This can be done by selecting the fields that need to be aligned (use the Shift key + click or drag around the elements to select them all), then use the **Layout** toolbar to align them appropriately.

3. Fix the tab order of your form, if needed

Click the **View** menu, then choose **Show Tab Order** to view the tab order of your form fields. The **Tab Order** palette will also open up in the left palette area. To fix the tab order, drag and drop fields in the **Tab Order** palette on the left.

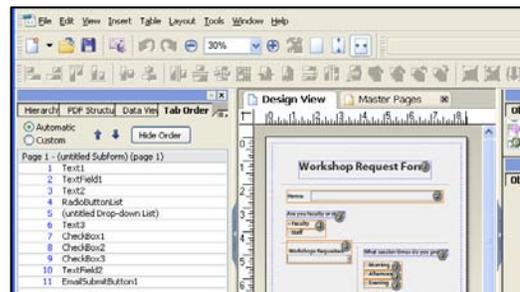


Figure 12: Show Tab Order. Form fields are numbered via tab order. Fix order by using the Tab Order palette on the left.

4. Complete a final “Save-As”

In order to deploy your form, it needs to be in PDF format. Make sure this is the case by re-saving your file. Click **File > Save As**, choose **Adobe Static PDF Form** from the **Save As Type** drop-down menu, then click **Save**.

4. Deploy

When deploying a PDF form that has been designed in LiveCycle, Adobe Acrobat is used. You can use the Distribute Form option in LiveCycle (**File > Distribute Form**), or you can open your PDF form in Acrobat, and distribute it from there. Using the Distribute Form option in LiveCycle will open your form up in Acrobat.

Deploy

- Distribute form (uses Acrobat)
- OR post PDF on Web

[Planet PDF](http://www.planetpdf.com/)

<http://www.planetpdf.com/>

RESOURCES

Faculty / Staff Resource Center

Located in ARC 3012. Assistance available on walk-in basis.

[FSRC Website](http://www.csus.edu/irt/acr/fsrc/) - <http://www.csus.edu/irt/acr/fsrc/>

Training & Tools eNewsletter

To receive email notification regarding online seminars, new technology/tools, and other online teaching, technology and learning events, fill out and submit the [Training & Tools eNewsletter request form](http://www.csus.edu/atcs/tools/newsletter/request-form-ait-news.stm) - <http://www.csus.edu/atcs/tools/newsletter/request-form-ait-news.stm>.

Getting Help

[University Help Desk](#)

(916) 278-7337 or helpdesk@csus.edu

[Academic Technology Consultants](#)

<http://www.csus.edu/atcs/contact.htm>

1on1 Help @ ATCS on Thursdays 1-4 pm in ARC 3005 (no appointment needed)

[Help Desk - Problem Reports & Contact Information](#)

<http://www.csus.edu/irt/helpdesk/contact.stm>

[Training Requests](#)

training@csus.edu

Campus Resources

[Training](#)

<http://www.csus.edu/training>

[Training Handouts](#)

<http://www.csus.edu/training/handouts>

[Online Tutorials](#)

<http://www.csus.edu/atcs/tools/training/tutorials.stm>

[Educational Tools](#)

<http://www.csus.edu/atcs/tools>

[Accessibility at Sacramento State](#)

<http://www.csus.edu/accessibility>