

# Adobe Certified Expert: LiveCycle ES2 Form Developer Exam



Adobe Enterprise Training has created and published this exam guide to help prepare partners, customers and consultants who are actively seeking accreditation in the Adobe Certified Expert program. This guide, while designed to describe the exam in detail and provide as much information as possible, is not meant to be the sole means of exam preparation. Adobe Enterprise Training offers courses that provide in-depth training on the exam content. Hands-on experience with the Adobe LiveCycle suite of tools is also a critical element in preparing to pass any Adobe certification exam.

Adobe® LiveCycle® Enterprise Suite 2.5 software can help extend the value of existing back-end systems by enabling developers to build and deploy applications quickly and easily, and by empowering business users to manage application environments based on their specific needs. LiveCycle ES2.5 makes it easier for people to interact with information through intuitive user experiences, improved efficiencies through business process automation, and enhanced customer service through personalized communications management.

To be certified as an Adobe Certified Expert - LiveCycle ES2 Form Developer, you must pass this exam. Other LiveCycle certification exams include LiveCycle RIA Developer, LiveCycle Solution Architect and LiveCycle Developer. For the LiveCycle Developer certification, you must pass the LiveCycle Core exam and at least one LiveCycle elective exam. The following table lists the available LiveCycle Developer Certification elective exams.

| Elective Exams                                 |
|--|
| 9A0-137 Adobe LiveCycle ES2 Process Automation |
| 9A0-138 Adobe LiveCycle ES2 Document Output    |
| 9A0-139 Adobe LiveCycle ES2 Data Capture       |
| 9A0-140 Adobe LiveCycle ES2 Digital Security   |

## Exam Description

The certification consists of achieving the minimum passing score on a multiple choice test. The certification exam has a time limit of 75 minutes, and includes a timer so that the student is aware of how much time is remaining.

The following lists the topic areas and percentage of questions delivered in each topic area.

| Topic Area                               | % of Exam | # of Questions |
|--|-----------|----------------|
| Understanding template types             | 7%        | 4              |
| Working with XFA                         | 7%        | 4              |
| Importing other file formats             | 2%        | 2              |
| Working with Master pages and page flows | 10%       | 6              |
| Working with data connections            | 10%       | 6              |
| Laying out a form                        | 8%        | 5              |

|                                   |     |   |
|-----------------------------------|-----|---|
| Designing dynamic forms           | 13% | 8 |
| Adding form intelligence          | 11% | 7 |
| Scripting                         | 11% | 7 |
| Submitting data                   | 7%  | 4 |
| Designing with fragments          | 7%  | 4 |
| Integrating with LiveCycle Server | 7%  | 4 |

## Exam Scoring

The exam contains 61 questions and an overall score of 77% is required to pass the test. After taking the test, test takers will be immediately provided with the official score for the exam. They will also receive an email with the official exam result.

## Scheduling Exams

The LiveCycle ES2 Form Developer ACE Exam is delivered via testing centers in 270 locations throughout the U.S. and 17 other countries around the world. Students may create a certification account through Adobe's Web site and schedule their certification in the location of their choice and at a time that is convenient for them. To register for the LiveCycle ES2 Form Developer ACE exam, go to the *Pearson VUE website* and click the link to register for the exam.

## Exam Preparation

If you have been exposed to LiveCycle Designer for at least one year and have hands on development experience, it is likely that you will be able to pass the Form Developer exam with only a review of the preparation guide and the associated product documentation related to each of the topics. However, if you are new to LiveCycle Designer, you should plan on several months of use before being prepared to pass this certification.

## Exam Topics

Following is a detailed outline of the information covered on the exam.

### Understanding template types

- Given an output file type in LiveCycle Designer, describe the differences between those output types (Output types include: XDP, static PDF, dynamic PDF, TDS)
- Given a form type, describe the characteristics of the form type (Form types include: static, dynamic, print, interactive, Acroform, artwork)

### Working with XFA

- Describe the XFA object model (Topics include: hierarchy, subform types, referenced objects, variables)
- Given a DOM, describe the functionality of that DOM (DOMs include: data, form, template, layout)
- Describe the rendering process of an XDP to a PDF

### Importing other file formats

- Importing an existing PDF into LiveCycle Designer
- Given a file format, import that file into LiveCycle Designer (File formats include: .IFD, .DOC, .XSN, .XFT)

### **Working with Master pages and page flows**

- Explain the purpose of Master pages
- Given a Master page property, describe the functionality of the property (Properties include: orientation, paper type, page occurrence)
- Explain the purpose of the Content area
- Controlling pagination on a form
- Creating page sets and page set properties

### **Working with data connections**

- Given a data connection, describe that data connection (Data connection types include: schema, XML sample file, WSDL, Adobe Data Model)
- Binding objects to data sources. (methods include: import and export binding, data binding, best practices for binding, relative vs. explicit binding)

### **Laying out a form**

- Given a layout tool, explain the purpose of that layout tool. (layout tools include: Justification, Alignment, Distribute, Make Same Size)
- Given a drawing aid, explain the purpose of that drawing aid (Drawing aids include: Show Grid, Snap to Grid, Show object boundaries, Interval)
- Given a form, set properties for that form (Properties include: Default, Preview, PDF Security, Save options)
- Create and explain the purpose of custom libraries (Includes: Adding objects to custom libraries)
- Set the tab order of fields by using the Tab Order tool

### **Designing dynamic forms**

- Describe the content flow of a subform (position vs. flowed)
- Describe the relationship between parent subforms and child subforms (position vs. flowed)
- Given a page overflow condition, explain how you would handle that condition
- Programmatically control repeating elements of a dynamic form by using the instanceManager
- Control properties of a subform programmatically and via the UI (includes: min count, max count, initial count, repeat subform, expand to fit)
- Create and use subform sets

### **Adding form intelligence**

- Generating scripts by using Action Builder
- Set validation patterns on a field (Patterns include: display, edit, validation, data)

### **Scripting**

- Given a property in the Script Editor, explain the purpose of that property (properties include: language, run at, show, enable event propagation)
- Given a form property, explain the purpose of that property (properties include: preserve scripting changes to form when saved, preview options, variables, form validation, enforce strict scoping rules in JavaScript)
- Given a form, locate a script
- Understand the SOM expressions within LiveCycle Designer
- Debugging scripts (Includes: activating the JavaScript console, writing to the console, interpreting a message from the console, using the Report palette, syntax checker)
- Interacting with a DOM

### **Submitting data**

- Understand the data submission options (Options include: submit to URL, submit as, signed submission, include)
- Submitting a form via email (Options include: using mailDoc, using mailto, using an email submit button)
- Acknowledge a response from a data submission

### **Designing with fragments**

- Creating a fragment (includes: in place vs. convert to embedded object)
- Given a fragment library property, explain the purpose of that property (properties include: show fragment preview, fragment info, fragment library location)
- Optimize binding in a fragment (Absolute vs. relative)
- Rendering a fragment within a form

### **Integrating with LiveCycle Server**

- Given an object in the library, explain the purpose of that object (objects include: form bridge, process fields, insertion point)
- Given a form property, explain how to use that property (properties include: target version, PDF render format, PDF security tab)

## **Study Suggestions**

Following are suggested steps to help you prepare for the LiveCycle ES2 Form Developer ACE Exam.

### **Recommended Classroom Training**

- *LiveCycle ES2.5: Designer Specialist*

### **Community Content**

- *The Difference Between Static and Dynamic*
- *Adobe XML Forms Architecture (XFA) Specification, version 3.1*
- *LiveCycle Designer ES form fragment tutorial*
- *LiveCycle Designer ES2 Scripting Basics*

### **Online Resources**

- *LiveCycle in Three Days video training*
- *LiveCycle Developer Center*
- *LiveCycle Documentation*
- *LiveCycle ES2 Self-paced Learning Resources for Designers and Developers*
- *Enterprise Cafe*
- *Tour de LiveCycle*

## **Exam Preparation Checklist**

The checklist below will help guide you through the process of obtaining ACE certification.

- Review this exam guide to become familiar with the topic areas and objectives of the exam
- Identify the topic areas and objectives you need to study
- Determine which study materials you need to improve your skills
- Study for the exam
- Contact Pearson VUE to register for an exam
- Take the exam - Your score is electronically reported to Adobe

## **Recertify when necessary**

Once obtained, your certification is valid until 90 days after the exam version of your certification is retired. Adobe will e-mail you a reminder when your certification is due for renewal and will let you know when you need to take another exam.

## Sample Exam Questions

Following are sample questions to help you prepare for the LiveCycle ES2 Form Developer ACE Exam.

1. Which statement best describes the Template DOM?
  - A. The Template DOM represents the structure and organization of the form, including the form intelligence
  - B. The Template DOM represents the placement of objects from the Form DOM into a particular position of a page
  - C. The Template DOM represents the result of the Data DOM merged with the Form DOM
  - D. The Template DOM represents the parent wrapper for all the other DOMs

Correct Answer: A

2. You are importing an existing PDF document as artwork. How must you save the form template?
  - A. as an Adobe Static PDF Form
  - B. as an Adobe Dynamic PDF Form
  - C. as an Adobe XML Form
  - D. as an Adobe LiveCycle Designer Template

Correct Answer: A

3. Which three types of objects are most likely found on a master page? (Choose three)
  - A. page header
  - B. images
  - C. text fields for data entry
  - D. page footers
  - E. bar codes
  - F. script object

Correct Answer: A, B, D

4. You are designing an XDP template that will be generated as a postscript file using LiveCycle Output. You want to ensure that the template prints in duplex. Which option should you enable in Designer?
  - A. Set the Page Set printing property to Print on Both Sides
  - B. Set the Page Set printing property to Page Occurrence
  - C. Set the Master Page printing property to Print on Both Sides
  - D. Set the Master Page printing property to Page Occurrence

Correct Answer: A

5. Which is an advantage of using the No data binding option on a dynamic form when a form object does NOT have to be bound to the data?
- A. Performance will increase because the layout event will NOT execute for that object during the render process
  - B. Performance will increase because when merging data with the PDF form, data will NOT have to be mapped to that object
  - C. Performance will increase because the data being merged with the template will be smaller
  - D. Performance will increase because when that field is rendered, it will NOT display any information

Correct Answer: B

6. Which content property of a subform positions the objects in the subform according to their individual X and Y coordinates?
- A. Positioned
  - B. Flowed
  - C. Top to Bottom
  - D. Western Text

Correct Answer: A

7. A form is created to display repeating rows of data. How will the subforms that wrap the repeating data be configured?
- A. Flowed subform wrapped inside a Positioned subform
  - B. Positioned subform wrapped inside a Flowed subform
  - C. Create a choice subform set
  - D. Create a subform set

Correct Answer: B

8. On the Binding palette for a subform, the Repeat Subform for Each Data Item is grayed out and disabled. What needs to be done to enable this option?
- A. The form must be saved as a dynamic form
  - B. The subform must be wrapped in a positioned subform
  - C. The subform must be wrapped in a flowed subform
  - D. The subform must be added to a subform set

Correct Answer: C

9. You have created a table object with a repeatable column called Cost. You need to total the Cost column in a Text Field. Which action should you choose?
- A. Create a scripting object that can be used to sum the total of the fields using FormCalc
  - B. Use the FormCalc Sum() function
  - C. Create an overflow trailer for the Cost column
  - D. Use a form variable to calculate the total amount of the Cost column

Correct Answer: B

10. You have a form-level script object named mySO containing a function named foo. You want to call function foo from a button on the form. Which is the correct syntax?
- A. mySO.foo()
  - B. foo()
  - C. call foo()
  - D. invoke("foo")

Correct Answer: A



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