



Adobe Certified Expert: LiveCycle ES2 Core 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.

The LiveCycle ES2 Core ACE Exam is a requirement for the Adobe Certified Expert - LiveCycle ES2 Developer certification. To be certified as a LiveCycle ES2 Developer, you must pass this exam and at least one LiveCycle elective exam. After passing the core exam, separate designations are available for each elective exam passed. 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 90 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 LiveCycle	9%	5
Understanding form types	8%	4
Creating and managing applications	13%	7
Understanding roles and permissions	6%	3
Designing processes	21%	11
Interacting with back end systems	9%	5
Creating and consuming custom components	8%	4
Working with events	8%	4
Securing and consuming end points	9%	5
Monitoring and troubleshooting processes	9%	5

Exam Scoring

The exam contains 53 questions and an overall score of 74% 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 Core 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 Core 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 for at least one year and have hands on development experience, it is likely that you will be able to pass the Core 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, 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 LiveCycle

- Given a solution category, describe the functionality provided by that category
- List and describe the end user interfaces provided by LiveCycle

Understanding form types

- Compare and contrast the differences between Acroforms and XFA forms
- List and describe the differences between PDF forms, Flash forms, and Guides
- Given a form type, explain when you would use that form type (Form types include: static, dynamic, interactive, and print)

Creating and managing applications

- List and describe the LiveCycle application model
- Describe the process of going from a development environment to a production environment (Creating an archive, what does an archive contain, importing an archive)
- Manage applications in Workbench. (Includes: assets, check in, check out, synchronization, versioning)

Understanding roles and permissions

- Given a scenario, identify which role should be assigned to an end user
- List and describe the relationship between roles and permissions (Includes: Custom roles)

Designing processes

- Given a start point, explain when you would use that start point (Start points include: Remoting, Workspace, EJB, REST, Web Service, Email, and Watched Folders)
- Add and configure activities in a process
- Use and access data in a process (Includes: variable types, XPath, SetValue, namespaces, and schema vs. data model)
- Control execution flow by implementing business rules
- Given a process type, configure the properties of that process type (Process types include: long-lived, short-lived)

Interacting with back end systems

- Configure and use the LDAP service
- Configure and use standard services for data sources (Data sources include: FTP, Web Services, JDBC, JMS, file utilities)
- List the document management systems to which LiveCycle can connect

Creating and consuming custom components

- Describe the structure of a custom component .jar file
- Given a component.xml file, describe the tags in that file
- Deploy and patch for a custom component

Working with events

- Describe the event model in LiveCycle and when you would use events
- Describe the behaviors of events (Behaviors include: Throw, Catch, Receive, Start point)
- Configure event properties
- Describe the different approaches to handling exceptions (Approaches include: event catch vs. start point)

Securing and consuming endpoints

- Describe the security parameters that can be configured for a service
- Given an endpoint, describe how to consume that endpoint (Endpoints include: Remoting, Workspace, EJB, REST, Web Service, Email, and Watched Folders)

Monitoring and troubleshooting processes

- Use the record and playback tool in Workbench
- Use the variable logger service
- Given an exception, explain where you should go to find more information (Includes: long-lived vs. short-lived)
- Determine the health of your LiveCycle environment by using the LiveCycle Health Monitor

Study Suggestions

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

Recommended Classroom Training

- *Developing a LiveCycle ES2.5 Application*
- *LiveCycle ES2.5: Process Management Specialist*
- *LiveCycle ES2.5: Document Output Specialist*

Community Content

- *An Introduction to LiveCycle Events*
- *Creating Custom DSC's for LC ES*
- *Extending LiveCycle ES for Java Developers*
- *Understanding LiveCycle ES2 application model*
- *LiveCycle ES2.5 Overview*
- *How to debug and test your LiveCycle ES processes*
- *Extending LiveCycle ES software through custom DSC development*

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 Core ACE Exam.

1. In a long-lived process, which types of variables are stored in a database table or the file system?
 - A. Complex variable types only
 - B. Document type variables only
 - C. All variable types
 - D. XML variables and variables that are Java POJO Classes

Correct Answer: C

2. How does the AND-WAIT Control Type property of the Gateway affect the execution of the main branch?
- A. NONE of the branches need to complete before the main branch continues
 - B. Only one branch needs to complete before the main branch continues
 - C. All the branches need to complete before the main branch continues
 - D. The Control Type does NOT effect the execution of the main branch

Correct Answer: C

3. You are designing a process by using Workbench. What is the difference between the Save option and the Check In option?
- A. There is no difference
 - B. Check In moves the process to the server, Save updates the database
 - C. Save saves the changes to the local file system, Check In moves the process to the server
 - D. Check In deploys the process the LiveCycle server, Save moves the process to the LiveCycle server

Correct Answer: C

4. You have created and deployed a LiveCycle process. You want to update the service to accommodate business changes. In which view should you check out the service for edit?
- A. Applications View
 - B. Services View
 - C. Processes View
 - D. Components View

Correct Answer: A

5. As part of an approval process, you have been assigned a task to complete. Which application should you use to complete the task?
- A. LaunchPad
 - B. Reader Extensions
 - C. Workspace
 - D. ContentSpace

Correct Answer: C

6. You want to build Flash-based panels to collect data from an end-user. After filling the form, the data must be merged on an XFA form. Which solution approach should you use?
- A. A Guide based on a data model
 - B. A print form that has sections that appear/disappear based on data
 - C. A PDF portfolio with PDF documents representing panels
 - D. A form created in Acrobat using dialogs to represent panels

Correct Answer: A

7. A Flash application needs to invoke a LiveCycle process. Which start point type provides the best performance?
- A. Remoting
 - B. Workspace
 - C. REST
 - D. Web Service

Correct Answer: A

8. You want to give a user permission to invoke a service. What should you do?
- A. Assign the Service User role to the user
 - B. Assign the Service Invoke permission to the user
 - C. Assign the LiveCycle Workspace Administrator role to the user
 - D. Add the Service Invoke permission to the Workspace User, then assign the role to user

Correct Answer: A

9. You want to create a certified document that is policy protected and enables additional functionality in Adobe Reader. Which is the correct order to execute the services required to do this?
- A. Protect Document, Certify PDF, Apply Usage Rights
 - B. Certify PDF, Apply Usage Rights, Protect Document
 - C. Apply Usage Rights, Certify PDF, Protect Document
 - D. Protect Document, Apply Usage Rights, Certify PDF

Correct Answer: A



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