

Updated on 09/02/2026

Sign Up

CAPA Certification Training

3 days (21 hours)

Overview

The CAPA Certification Training prepares you for the official Certified Argo Project Associate certification and enables you to master the essential uses of the Argo Project ecosystem for DevOps, GitOps, and Kubernetes practices.

This intermediate-level training course guides you through preparing for the Certified Argo Project Associate exam. You'll learn about the role of each component, typical use cases, and key concepts to help you effectively choose between Argo Workflows, Argo CD, Argo Rollouts, and Argo Events.

You'll learn how to design processing workflows, manage artifacts, structure dependencies using DAGs, and deploy applications using a declarative GitOps approach. The exercises will help you apply manifests, controllers, and synchronization mechanisms to real-world scenarios.

The training also covers incremental delivery strategies with Argo Rollouts, as well as event-driven architectures with Argo Events. You'll learn to identify the components, resources, and expected interactions in scenarios frequently assessed by the certification.

By the end of the course, you'll have a structured review method, a comprehensive understanding of the exam topics, and the benchmarks needed to confidently take the Certified Argo Project Associate exam.

Like all our training courses, this one will introduce you to **the latest stable version** of the technology and its new features.

Objectives

- Identify the roles, architecture, and use cases of the components in the Argo ecosystem
- Create and analyze Argo workflows using templates, artifacts, and DAG dependencies
- Apply GitOps principles with Argo CD to synchronize Kubernetes applications
- Select and configure gradual deployment strategies with Argo Rollouts
- Understand the sources, sensors, and triggers of Argo Events
- Prepare for the questions and scenarios on the Certified Argo Project Associate exam

Target Audience

- DevOps Engineer
- Cloud Engineer
- Kubernetes Administrator
- Platform Engineer
- Data Engineer

Prerequisites

- Knowledge of the principles of application deployment on Kubernetes
- Experience with YAML manifests and Kubernetes resources
- Basic understanding of source code management with Git
- Understanding of CI/CD and GitOps principles

Technical Prerequisites

- Workstation running Windows 11, macOS, or Linux, with 16 GB of RAM recommended
- Container environment installed, such as Docker Desktop or Podman
- kubectl, kind, or minikube tools available to run a local cluster
- Code editor such as Visual Studio Code with support for YAML files
- Stable internet connection allowing access to Git repositories and container image registries

CAPA Training Course Outline

[Day 1 - Morning]

The Argo Ecosystem and Certification Preparation

- Overview of the Certified Argo Project Associate certification and preparation plan
- Overview of the Argo Project ecosystem: Workflows, CD, Rollouts, and Events
- DevOps Principles, CI/CD, GitOps, and Cloud-Native Architecture
- Review of Kubernetes objects, controllers, CRDs, and YAML manifests
- Review of competency areas and identification of high-weighting concepts

[Day 1 - Afternoon]

Argo Workflows: Fundamentals and Orchestration

- Argo Workflows architecture: controller, Workflow, WorkflowTemplate, and ClusterWorkflowTemplate
- Structure of a manifest: entrypoint, templates, parameters, scripts, and containers
- Sequential and parallel execution of tasks on Kubernetes
- Managing inputs, outputs, and artifacts in a workflow
- Analysis of terminology pitfalls and architecture choices expected on the exam
- Hands-on workshop: creating, submitting, and troubleshooting a multi-step processing workflow that produces an artifact

[Day 2 - Morning]

Argo Workflows: DAGs, Data, and Resilience

- Modeling a DAG and defining dependencies between tasks
- Using conditions, parameters, loops, and fan-out mechanisms
- Executing data processing with containerized tasks and parallelism
- Managing failures, retries, timeouts, and recovery strategies
- Reading and interpreting a workflow's status to address certification scenarios

[Day 2 - Afternoon]

Argo CD and GitOps Deployment

- Argo CD Fundamentals: Desired State, Live State, Reconciliation, and Application
- Declaring applications, projects, Git sources, and Kubernetes destinations
- Manual and automated synchronization, drift detection, and OutOfSync state management
- Integration of simple manifests, Helm, and Kustomize
- Identifying reconciliation patterns and revision tracking strategies
- Hands-on Workshop: Deploy a declarative application with Argo CD, trigger a drift, and then restore the desired state through synchronization

[Day 3 - Morning]

Argo Rollouts and incremental delivery

- Differences Between Kubernetes Deployments and Rollout Resources
- Blue-Green and Canary Deployment Strategies
- Managing Stages, Promotion, Abortion, and Rollback
- Analysis Principles Using AnalysisTemplate and AnalysisRun
- Selecting a progressive delivery strategy based on risk, traffic, and available metrics

[Day 3 - Afternoon]

Argo Events and certification simulation

- Argo Events architecture: EventSource, EventBus, Sensor, and Trigger
- Event sources, dependencies, filtering, and triggering of Kubernetes resources
- Integration between Argo Events, Argo Workflows, and Argo CD
- Comprehensive review of the four tools and comparison of use cases
- Time-management techniques, keyword analysis, and multiple-choice question handling
- Hands-on workshop: conducting a certification simulation, reviewing answers, and creating a targeted study plan

Target Organizations

This training is intended for both individuals and companies—large or small—that wish to train their teams in new, advanced IT technologies or to acquire specific industry knowledge or modern methodologies.

Entry-Level Assessment

The pre-training assessment complies with Qualiopi quality standards. Upon final registration, the learner receives a self-assessment questionnaire that allows us to evaluate their estimated proficiency in various types of technologies, as well as their expectations and personal goals for the upcoming training, within the limits imposed by the selected format. This questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could pose challenges for monitoring and ensuring the smooth operation of the training session.

Teaching Methods

Hands-On Training: 60% Practical, 40% Theoretical. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the instructor—supported by examples and reflection sessions—and group work.

Assessment

At the end of the session, a multiple-choice quiz is administered to verify that participants have successfully acquired the skills.

Certification

A certificate will be issued to each trainee who has completed the entire training program.