

CloudBees





Certification Guide for:

CloudBees CI Essentials

Information, Instructions, and Study Guide 09 August 2022

Table of Contents

About This Certification	3
Who is it for?	3
What is the exam based on?	3
Prerequisites	3
Cost	3
About the Exam	3
Registration and Scheduling the Exam	4
Accessibility and Accommodations	5
Recertification	5
APPENDIX A: Exam Blueprint	6
APPENDIX B: Practice Questions	8
APPENDIX C: FAO	10

About This Certification

The CloudBees CI (Continuous Integration) Essentials certification is the foundational first step on the training and certification path for job roles that require knowledge and skill with CloudBees CI. It is a prerequisite for more advanced training and certifications for many of the roles defined in CloudBees University.

The certification is earned by passing a proctored online exam.

Learn more about our certification tiers and how they tie in to our role-based learning paths at <u>CloudBees Certification Levels</u> and <u>CloudBees Role-based Learning Paths</u>.

Who is it for?

The CloudBees CI Essentials certification is designed for *everyone* that uses CloudBees Continuous Integration, ensuring a conversational understanding of what CloudBees CI can do. Implementation and technical problem solving skills are covered in higher levels of certification.

What is the exam based on?

The body of knowledge for this course is the CloudBees CI Essentials course and the <u>CloudBees</u> <u>CI Lexicon</u> (terminology and definitions).

Prerequisites

There are no required prerequisites for this certification exam other than a functional knowledge of the basic principles and components of CloudBees CI and Jenkins.

However, it is *strongly* recommended that you take the CloudBees CI Essentials online course through CloudBees University. That course will ensure you have a conversational understanding of what CloudBees CI can do.

Cost

Registration for the exam costs \$99 USD.

About the Exam

The exam consists of 50 multiple-choice questions and must be completed in 60 minutes. It is available only as a remote-proctored online exam. Of the 50 questions you will see, 45 of them will count toward your score, while 5 are "field test" questions, which do not count for or against your score.

You can take the exam at any computer with a reliable internet connection. Be advised, however, that you will need to install a browser extension before the exam, so make sure you have sufficient privileges on the computer you intend to use. Google Chrome is the recommended browser.

NOTE: A webcam is required for the online proctored exam.

Pass/Fail results will be reported immediately upon completion of the exam and you will receive an email with a link to your certificate (that can be shared on LinkedIn) within 10 days.

Registration and Scheduling the Exam

You must register for the exam through the CloudBees University CI page (https://university.cloudbees.com/page/cloudbees-ci). Choose the role-based learning and certification path that best suits you and/or your job role. There you will find all the relevant training and the "Prepare for the CloudBees CI Essentials Certification Exam" course. This course is required and will tell you everything you need to know about how to prepare for and take the exam.

At the end of the course, you will find a link to purchase the exam. Upon purchase, you will find more information and a link to the Exam Portal where you will schedule the exam.

When you schedule the exam, you should receive an email with detailed instructions and links. Please read that email completely, as the instructions are important to preventing any exam-day issues.

If you did not receive an email from testingsupport@getyardstick.com, check your spam/junk mail folders. If you still don't have it, please email testingsupport@getyardstick.com, check your spam/junk mail folders. If you still don't have it, please email testingsupport@getyardstick.com, regarding your confirmation email.

No Shows and Cancellations: Failure to take the exam at the scheduled time will be considered a "no show" and you will forfeit your exam fee.

Rescheduling: If you need to reschedule or cancel the exam, you can do so by logging in to the Exam Portal through the appropriate course in CloudBees University (Use the "Access the Exam Portal" button in the Schedule/Log in to Exam lesson).

Please note that rescheduling or cancellation must be completed at least 72 hours prior to your scheduled exam time.

If you have special circumstances that caused you to have to make a change on short notice, you can request special consideration by reaching out to testingsupport@meazurelearning.com or certifications@cloudbees.com.

Accessibility and Accommodations Policy

CloudBees provides special accommodations in accordance with the Americans with Disabilities Act of 1991 (ADA). If a disability prevents you from taking the examination under standard conditions, you may request special accommodations. Written requests explaining the nature of the disability (i.e., the diagnosis), the type of accommodation you feel is appropriate, and any supporting documentation of the diagnosis from a qualified healthcare professional must accompany the registration application. CloudBees reserves the right to request reasonable documentation from healthcare or other professionals to support requests for special accommodations.

For instructions on how to request accommodation, see the FAQ at the end of this Handbook.

Expiration and Recertification

This certification expires in 3 years from the date of your certificate. This is to ensure you are staying current and up to date on the software and platform, since they evolve over time.

In order to maintain your certification, you will need to Recertify before your certification expires in 3 years.

The recertification requirements for this program are still under review, but will consist of a training requirement. Please check back with CloudBees Certification or related documentation for updates. If you receive the certification before the requirements are posted, we will contact you regarding recertification.

APPENDIX A: Exam Blueprint

This Exam Blueprint shows the topics (domains) and sub-topics (sub-domains) covered on the exam, as well as the tasks expected of the candidate in the exam.

The percentage given below the domain names indicate the weight of the domain on the exam (i.e. Domain I: Controllers and Operations Center constitutes 15% of the exam).

Domain	SubDomain	Tasks
I: Controllers and Operations Center 15%	Ops Center	Describe why one would use Ops Ctr vs Jenkins - or - Identify the benefits of Ops Ctr
		Describe how Operations Center can streamline job management across a cluster
	Controllers	Identify different types of controllers - e.e. client, managed, team
		Describe the purpose and function of different types of controllers - e.g. client, managed, team
II: Enterprise Management 35%	Reliability	Describe the tools available for the backup & restore process for CI
		Identify the major differences between a backup & restore process on traditional and modern platform architecture
		Articulate what High Availability is and what benefits it provides
	Enterprise support	Describe CloudBees' Support offerings for system and plugin updates
		Articulate the purpose of Jenkins Health Advisor
	Managing CI at Scale	Define CasC is and describe the benefits of CasC
		Describe methods for managing controllers at scale
		Identify the benefits of shared libraries
	Plugin Management	Articulate the purpose and main benefits of CloudBees Assurance Program
		Define the different plugin support tiers that CAP has to offer
	Developer Productivity	Articulate how CloudBees CI reduces context switching via SCM integrations
		Describe why reducing context switching via SCM integrations through CloudBees CI is good for developers

		Identify some common Integrations in CloudBees CI that help improve developer productivity
III: Pipelines 25%	Core Concepts	Understanding the purpose of a pipeline and what type of workload it represents
		Demonstrate understanding of the concept of a Jenkinsfile
		Recognize the various sections of a Jenkinsfile
	Enterprise Capabilities	Describe the purpose and main benefits of Pipeline Templates & Catalogs
		Describe the purpose and main benefits of Pipeline Policies
		Describe the purpose and main benefits of Cross Team Collaboration
IV: Agents 15%	Core Concepts	Describe the purpose of a build agent
		Identify the different types of agents - SSH & shared static vs dynamic
		Describe the advantages of ephemeral agents over static agents
		Define artifacts
	Enterprise Capabilities	Identify the benefits of shared Agents
		Identify the benefits of Kubernetes Agents
V: Security 10%	SSO	Articulate the purpose and benefits of SSO
	RBAC	Articulate the purpose and benefits of RBAC
		Identify the resources that help you stay informed about security vulnerabilities
	Audit and compliance	Explain how CloudBees CI tools can help with audit and compliance

APPENDIX B: Practice Questions

Below are five sample questions similar to ones you may encounter on the exam. These are for practice/informational purposes only.

- 1: What is the name of the CloudBees program for optimizing plugin resources?
 - A: Plugin Hive
 - B: Beekeeper
 - C: Plugin Cloud
 - D: Plugin Optimizer
- 2: What's the primary use case for a team controller?
 - A: Provides small to medium teams with their own CasC implementation
 - B: Intended for small teams with its own RBAC configuration
 - C: Provides special functionality for purpose-built teams
 - D: Enables teams from 50 to 1,000 users to own their own controller
- 3: What is a Checkpoint in CloudBees CI?
 - A: A point in the build process where the devops engineer pauses to check their work for integration issues.
 - B: The point in a build at which an engineer commits the new code
 - C: A computational resource for running builds and performing operations.
 - D: A step that can be added to a Pipeline that allows you to restart a Pipeline build from a certain point.
- 4: What primary platform is a CloudBees CI Modern implementation run on?
 - A: Kubernetes

neans of organizing Projects or other items within the Jenkins workspace, much like directories esktop computer's filesystem" is the definition for what term in CloudBees CI?
A: Jenkinsfile
B: Node
C: Folder
D: Workspace

B: Docker Swarm

D: Amazon Web Services

C: Helm

Answers:

1:B, 2:B, 3:D, 4:A, 5:C

APPENDIX C: FAQ

• What is the passing score for the exam?

We do not publish the passing score, as it may vary depending on the difficulty of the version of the exam you are given. This is common practice among professional credentials.

I failed the exam, now what?

You may re-register and retake the exam. We strongly recommend that you study based on the feedback you get from the score report after the exam.

I registered for the exam but I need to reschedule. How do I do that?

See "Rescheduling" on Page 4 above.

My score report after the exam showed "Field Test Items (Unscored)". What is that?

Field Test Items are potential future exam questions that we are collecting data on. There are a few mixed into your exam, but they do not count for or against your actual score. b They are for administrative data collection only.

 I have a disability or medical condition that affects my ability to take an exam. How do I request Special Accommodation?

See Accessibility and Accommodations on Page 4.

Written requests with a subject line of Exam Accommodation Request should be made to certifications@cloudbees.com explaining the nature of the disability (i.e., the diagnosis) and the type of accommodation you feel is appropriate (such as additional time, etc.).

Your request will be routed to the appropriate persons who will consider your request and who may reach out to you to request supporting documentation of the diagnosis from a qualified healthcare professional.

More answers can be found on the CloudBees University FAQ site.