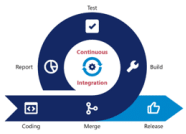
Continuous Integration with Jenkins

Duration: 2 days Price: € 1399

Open Schedule



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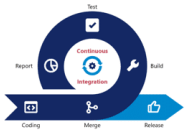

Audience Course Continuous Integration with Jenkins

The course Continuous Integration with Jenkins is intended for developers, testers and administrators who want to use Jenkins 2 to set up a continuous integration pipeline.

Prerequisites Course Continuous Integration with Jenkins

Experience with IT projects in a DevOps environment with the Agile Development methodology and Scrum is beneficial for the understanding but not strictly necessary.

Realization Training Continuous Integration with Jenkins

The theory is discussed on the basis of presentations and demos and is interchanged with exercises. Demo projects clarify the discussed concepts. The course is done in the latest version of Jenkins, version 2. Course times are from 9.30 up and to 16.30.

Certification Continuous Integration with Jenkins

After successful completion of the course the participants receive an official certificate Continuous Integration with Jenkins.

Content Course Continuous Integration with Jenkins

In the course Continuous Integration with Jenkins participants learn how the latest version of Jenkins can be used to set up a continuous integration and continuous delivery (CI/CD) pipeline. CI/CD is a best practice in agile development where changes in the code of a software project are automatically tested and integrated.

DevOps Process

CI/CD is part of the DevOps process whereby developers check in code regularly into a central repository and relevant tests and builds are automatically executed. Tools ensure that the new code is correct before it is integrated into the software project.

Jenkins Configuratie

The course starts discussing the version control systems and build tools supported by Jenkins. Jenkins plugins, the Jenkins DSL and the Jenkins file are also treated.

Dashboards

You will learn then learn based on the Jenkins GUI and the Jenkins Dashboard, how to set up declarative and scripted pipelines in Jenkins. The role of Masters and Nodes, Agents and Executors are discussed and their relationship explained.

Job Triggering

Attention is also paid to the triggering of jobs. Jobs can be triggered periodically or with input from the user based on parameters. Retries, timeouts, conditional and parallel execution are also on the course program.

Project Types

Jenkins supports various project types such as Maven or Gradle projects, Freestyle projects, Pipeline and GitHub projects. The setup of such projects is explained as well as multibranch and external projects.

Reporting

Finally various reporting options from Jenkins projects are discussed and how Jenkins and container technology such as Docker can work together.

Modules Course Continuous Integration with Jenkins

Module 1 : Jenkins Intro	Module 2 : Creating Pipelines	Module 3 : Pipeline Execution
What is Jenkins?	Declarative Pipelines	Triggering Jobs
Continuous Integration	Jenkins GUI	Build After
Hudson Predecessor	Jenkins Dashboard	Build Periodically
Version Control	Blue Ocean	Cron Syntax
Git, CVS and BitBucket	Pipeline Structure	Poll SCM
Build Tool Support	Pipeline Development	User Input
Distributed Builds	Scripted Pipelines	Parameters
Jenkins Plugins	Declarative Pipelines	Flow Control Options
Installing Jenkins	Masters and Nodes,	timeout and retry
The Jenkinsfile	Agents and Executors	Conditional Execution
Jenkins DSL	Snippet Generator	Parallel Execution
Groovy Scripts	Running Pipelines	Handling Concurrency
Module 4 : Project Types	**Module 5 : Reports**	**Module 6 : Integrating Containers**
Freestyle Projects	Notifications	Docker in Pipeline
Maven Projects	Jenkins URL	Configured as a Cloud
Discard Old Builds	Email Notifications	Docker Images as Agents
GitHub Projects	Build Results	SSH Credentials
Throttle Builds	Collaboration Services	Container Settings
Build Environment	Webhooks in Slack	Launching Options
Post-Build Actions	Default Notifications	Persistent Docker Nodes
Pipeline Projects	HipChat Plugin	Global Variables
External Project Types	HTML Reports	withDockerRegistry Pipeline
Multiconfigurations	Publishing Reports	inside Method
Multibranch Projects	Integrating Artifacts	Docker via Shell
Branch Indexing	Conversions	Other Interfaces

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