

1. Course Objectives

Students will come away from this workshop with a solid understanding of how to implement a Continuous Integration environment in their organization. They will be able to set up a working instance of Hudson server, complete with automated builds, tests, code quality audits and reports, and automatic deployment to an integration server. They will also be able to integrate Hudson with other tools in the development environment, such as issue tracking systems and source code browsers.

2. Audience

This is a hands-on, practical course designed to teach specialized skills for real-world development situations. It is thus primarily aimed at a developer audience:

- Java developers of all levels
- Software architects
- Technical project managers
- Build Managers
- Development and QA engineers

3. Approach

The course is modular and flexible - depending on specific student needs and requests. Through our trainings, you benefit from the wide experience and architectural expertise of our team. We bring that experience to you in a highly interactive, intensely hands-on setting.

4. Assumptions

We assume participants have a reasonable understanding of Java development as well as a basic understanding of the Software Development Life Cycle.

5. Lab Work

All our courses are above all practical in nature. We believe that the best way to learn is by doing. So the course contains approximately 60% lab work.

6. Outline

This course is an intensive 1-day workshop, with a mixture of teaching and lab exercises. You will learn about how to design and implement an effective Hudson build environment, as well as some invaluable tricks of the trade.

The basic course program is outlined here:

1. An introduction to Continuous Integration (CI) principles
2. What you need to implement CI
3. CI-friendly development practices
4. Setting up a Hudson server
5. Continuous Integration build strategies and best practices
6. Hudson notification strategies and techniques
7. Automated testing
8. Automated code quality audits
9. Automated reporting on project status and statistics
10. Integrating Hudson with your issue management system
11. Automated release strategies
12. Automated deployment
13. Using distributed builds to speed up the build process and to run environment-specific build jobs
14. Applying Hudson to large projects - using CI on with large teams or multi-team projects, with multiple development/integration SCM branches,...

7. Instructor Bios

Andrew Glover

Andrew Glover is an entrepreneur, author, speaker and software developer. In 2001, he founded Vanward Technologies, a professional services company focussed on software testing where he served as the company's CTO and later, the CEO. After Vanward's acquisition by JNetDirect in 2005 - he served as the CTO of JNetDirect and later as President of Stelligent - a professional services firm provide Agile engineering consulting. Andy is the found of 2009 Jolt award winning east Behavior Driven Development framework and is the co-author of a number of books including 2008's Jolt award winning Continuous Integration, Groovy in Action and Java Testing Patterns. He regularly writes about software development and the software industry at a widely syndicated [technology blog](#) He is fortunate enough to have opportunity to speak to a variety of audiences at various conferences around the globe on such topics as Behavior Driven Development, Cloud Computing and Agile Software Development.

Kohsuke Kawaguchi

Kohsuke Kawaguchi is the creator of Hudson, later renamed Jenkins. He wrote the majority of Hudson/Jenkins core single-handedly. He has an extensive experience in software development for more than 10 years, ranging from Java to C++, .NET to x64 assembly, and system expertise on different platforms, such as Windows, Linux, and Solaris. This broad range of expertise was a key enabler in various advanced features of Hudson/Jenkins. Aside from Hudson/Jenkins, Kohsuke was involved in JAXB, Metro web services stack, GlassFish v3, and RELAX NG at Sun Microsystems. He's also known for a large number of open-source projects, such as args4j, YouDebug, com4j, Animal Sniffer, Sorcerer, wagon-svn, MSV, Parallel JUnit extension, to name a few. See [Kohsuke's site](#) for more information about Kohsuke.