
Linux Academy
Jenkins
…an Introduction

Introduction

What is Jenkins?

… an application that monitors executions of repeated jobs, such as building a software project or jobs run by cron.

Traditionally, development makes software available in a repository and then operations builds and deploys the software to one or more environments. A QA Team may then execute load and performance tests against that build and release it for production use.

Jenkins can automate large portions of that repeatable process!

Introduction

Continuous Integration

… is a development practice that requires developers to integrate code into a shared repository several times per day (repos in subversion, CVS, mercurial or git). Each check-in is then verified by an automated build, allowing everyone to detect and be notified of problems with the package immediately.

This is driven by the “instant gratification” that the internet has helped to reset expectations for. In order to reach the “real time” deployment goals of delivering new features, traditionally manual processes have to be automated and reacted to as fast as they occur.

Introduction

Build Pipeline

… is a process by which the software build is broken down in sections:

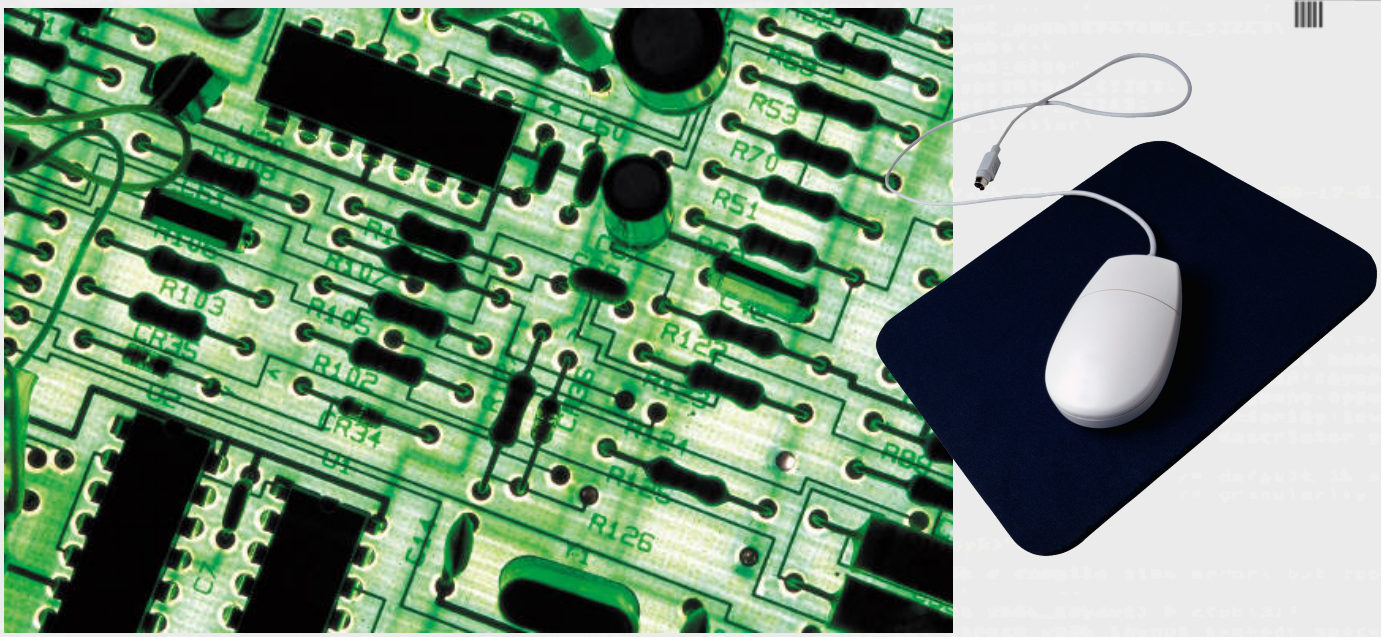
- Unit test
- Acceptance test
- Packaging
- Reporting
- Deployment
- Notification

These can then be executed in series, or in parallel, and depending on the success or failure of any phase, it can automatically be moved to the next phase.

Very “DevOps” in that, through automation, the tools and skills needed are very “cross domain”.

Linux Academy

Introduction



Jenkins:

The concepts of Continuous Integration, Build Pipeline and the new “DevOps” movement are revolutionizing how we build, deploy and use software. Tools that are effective in automating multiple phases of these processes (like Jenkins) become more valuable in organizations where resources, time or both are at a premium. As a result, so do you, if you know how to use it!