



Introduction and Housekeeping

DevOps Practitioner

transforming performance
through learning

Instructor introduction

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- Senior Learning Consultant
- London, United Kingdom
- Background
 - PhD in school timetable optimisation
 - Java
 - DevOps

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Student introductions

Your name

- **What is work about (If you want to talk about it)**
- **Experience with**
 - Git/Bitbucket
 - Jenkins
 - Docker
 - Puppet/Chef
 - Nagios
- **Whether you plan on deploying on-prem to the cloud or both**
- **Are you in development, operations or both**
- **What you want to get out of class**

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Administration

- **Front door security**
- **Name card**
- **Chairs**
- **Fire exits**
- **Toilets**
- **Smoking**
- **Coffee Room**
- **Downloads & Viruses**
- **Admin support**
- **Messages**
- **First Aid**
- **Telephones/Mobiles**

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We need to deal with practical matters right at the beginning.

Above all, please ask if you have any problems regarding the course or practical arrangements. If we know early on that something is wrong, we have the chance to fix it. If you tell us after the course, it's too late! We ask you to fill in an evaluation form at the end of the course. If you alert us a problem for the first time on the feedback form at the end of the course then we have not had the opportunity to put it right.

If this course is being held at your company's site, much of this will not apply or will be outside our control.

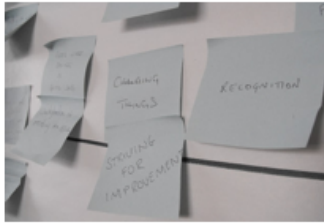
Course logistics

- **Timing:**
 - Time is typically from 9:30 – 4:30
 - 45 minutes – 1 hour lunch/mid-class break
 - 15 minutes break each morning and afternoon
- **We know you have two jobs to do this week!**
 - If you have scheduled meetings, please let me know
 - We can try to schedule breaks around them

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Course delivery



Lecture material



Course workbooks

Hear and Forget
See and Remember
Do and Understand



Questions and exercises



Practical sessions

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The course will be made up of lecture material coupled with the course workbook, informal questions and exercises, and structured practical sessions. Together, these different teaching techniques will help you to absorb and understand the material in the most effective way.

The course notebooks contain all the overhead slides that will be shown, so you do not need to copy them. In addition, there are extra textual comments (like these) below the slides, which are there to amplify the slides, provide further information. Hopefully these notes mean you will not need to write too much and can listen and observe during the lectures. There is, however, space to make your own annotations too.

In the practical exercise sessions, you will be given the opportunity to experiment and consolidate what has been taught during the lecture sessions. Please, please tell the instructor if you are having difficulty in these sessions. It is sometimes difficult to see that someone is struggling, so please be direct.

The training experience

- **A course should be:**
 - A two-way process
 - A group process
 - An individual experience



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The best courses are not those in which the instructor spends all his or her time pontificating at the front of the class. Things get more interesting if there is dialogue, so please feel free to make comments or ask questions. At the same time, the instructor has to think of the whole group, so if you have many queries, he or she may ask to deal with them off-line.

Work with other people during practical exercise sessions. The person next to you may have the answer, or you may know the remedy for them. Obviously do not simply 'copy from' or 'jump-in on' your neighbour but group collaboration can help with the enjoyment of a course.

We are also individuals. We work at different paces and may have special interests in particular topics. The aim of the course is to provide a broad picture for all. Do not be dismayed if you do not appear to complete exercises as fast as the next person. The practical exercises are there to give plenty of practical opportunities; they do not have to be finished and you may even choose to focus for a long period on the topic that most interests you. Indeed there will be parts labelled 'if time allows' that you may wish to save until later to give yourself time to read and absorb the course notes. If you have finished early, there is a great deal to investigate. Such "hacking" time is valuable. You may not get the opportunity to do it back in the office!

Outline

- **Day 1:**
 - What is DevOps?
 - Intro to cloud computing with AWS
 - Using source control with git
- **Day 2:**
 - Building software with Maven
 - CI/CD with Jenkins
- **Day 3:**
 - Containerisation with Docker
- **Day 4:**
 - Server Automation with Puppet
- **Day 5:**
 - Monitoring with Nagios

Course Objectives

- **By the end of this course you will be able to**
 - Be able to discuss DevOps tooling strategies
 - Understand the different stages and tools which can be used to automate this process
 - Be able to setup a full devops pipeline
 - Investigate new tools for yourselves!

Assumptions

- **Must:**
 - Feel comfortable with basic terminal commands in Linux
- **Useful**
 - Have had some experience as either a developer, operations or DevOps
 - Experience of using the windows command line
 - Programming experience

Any questions?

- **Golden Rule**
 - 'There is no such thing as a stupid question'
- **First amendment to the Golden Rule**
 - '...even when asked by an instructor'
- **Corollary to the Golden Rule**
 - 'A question never resides in a single mind'

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Please feel free to ask questions.

Teaching is a much more enjoyable and productive process if it is interactive. You will no doubt think of questions during the course; if so, ask them!