Course Introduction

Service Orientated Architecture (SOA)

Oxford University Software Engineering Programme
Nov 2016

Introduction

- Aims

- Pre-requisites

- Contents

- Objectives

- Resources

- Rules of Engagement

- Introductions

Aims

Pre-requisites

Covered by the Pre-Study Guide

- **Command line** tooling and Unix commands
- Some **Python programming** and **text editors**
- **Basic Understanding** of networking, servers and distributed computing

Format

- A mixture of lectures and practical labs

- Lectures aim to provide the wider context and background
  - Independent of specific technologies

- Labs are based on specific technologies
  - Designed to demonstrate the principles

Lab model

- Local Virtual Machine
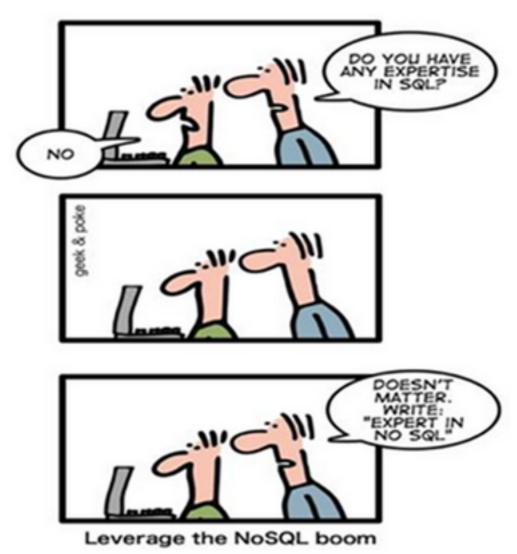 - Ubuntu
  - Pre-installed SOA software

Contents

Practicals

Specific Objectives

Improve your CV?

Beyond the scope of this course

Rules of Engagement

- ***Ask questions as we go along***
  - We will "park" any that are better answered later
  - Don't wait till the end to ask or raise concerns
  - If you don't ask we can't help you

First Run since a major update!

- This is the first running of this course since it was re-written
- Please take that into consideration:
  - There will be bugs!
- Please help out:
  - Please create new issues on the Github repository
  - https://github.com/pzfreo/ox-soa2/issues/new

Paul Fremantle

- CTO and Co-Founder of WSO2
  - Currently on study leave
- Previously Senior Technical Staff Member, IBM WebSphere architecture
- VP, Apache Synapse and Member of ASF
- MA in Maths and Philosophy
- MSc in Computation (1995)
- Teaches SOA module
- PhD Research Student

You?

Approximate Schedule

Monday	Tuesday	Wednesday	Thursday	Friday
Overall Introductions First Cloud lab exercise	Introduction to Big Data and case studies Hadoop Lab 1	Spark and SQL SparkSQL Lab	Visualisation Visualisation Lab	Overview and Recap Presentation Group Exercise
Cloud Overview and case studies Elastic Cloud Lab	Hadoop details, Map-Reduce Hadoop Extras	Storage and NoSQL Cassandra Lab	Containers Docker Lab	Final Thoughts and Assignment
Cloud Theory Platform-as-a-Service, scaling Further Cloud Lab	Intro to Spark	Cassandra details Cassandra Lab2	Realtime Big Data Realtime Lab	

Let's get started