



DevOps Fundamentals

The Full Stack Of Culture, Practices & Automation

Study Guide



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How to Use This Document

This document is your **DevOps Fundamentals Study Guide** to help you prepare for the **DevOps Fundamentals examination**.

It is meant to provide you with a clear outline of everything covered in the online course that will be on the PeopleCert DevOps Fundamentals exam.

Your exam will be closed book. You will be given 60 minutes to complete it. It contains 40 multiple choice questions and to pass the exam you must achieve a grade of 70% or higher, or a minimum of 28/40 correct responses. For further details on your exam, including more information on question types and learning objectives, please refer to your course syllabus.

As you follow along, you may see that some material in the online course is not replicated here. This study guide does not contain questions, activities, knowledge checks, or other material in the online course. It also does not contain content that is not examinable, but instead is designed to reinforce learning or add value to your course experience.



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Course Outline



Introduction:

What is DevOps?



Module 1:

The Urgency For DevOps



Module 2:

Key DevOps Principles & Concepts



Module 3:

The Full Stack –
People & Culture



Module 4:

The Full Stack –
Processes & Practices



Module 5:

The Full Stack –
Technology & Automation



Wrap Up & Review



Introduction

What Is DevOps?



The Key Concepts Of DevOps

DevOps is a coined noun used to describe an evolution of existing IT best practices from ITIL, Lean and Agile into a development and operations approach that supports automation and continuous delivery, and encourages a culture of collaboration and learning to help IT deliver business value better, faster and cheaper than ever before.

DevOps Is:

- A movement, philosophy or ideology that promotes a set of principles, practices and values
- About the relationship between development and operations
- A cultural shift that permeates throughout an entire organization
- Focused on communication and collaboration
- About automation and new tools to support that communication and collaboration
- Concerned with balancing the speed and change required by Development with the reliability and stability required by Operations

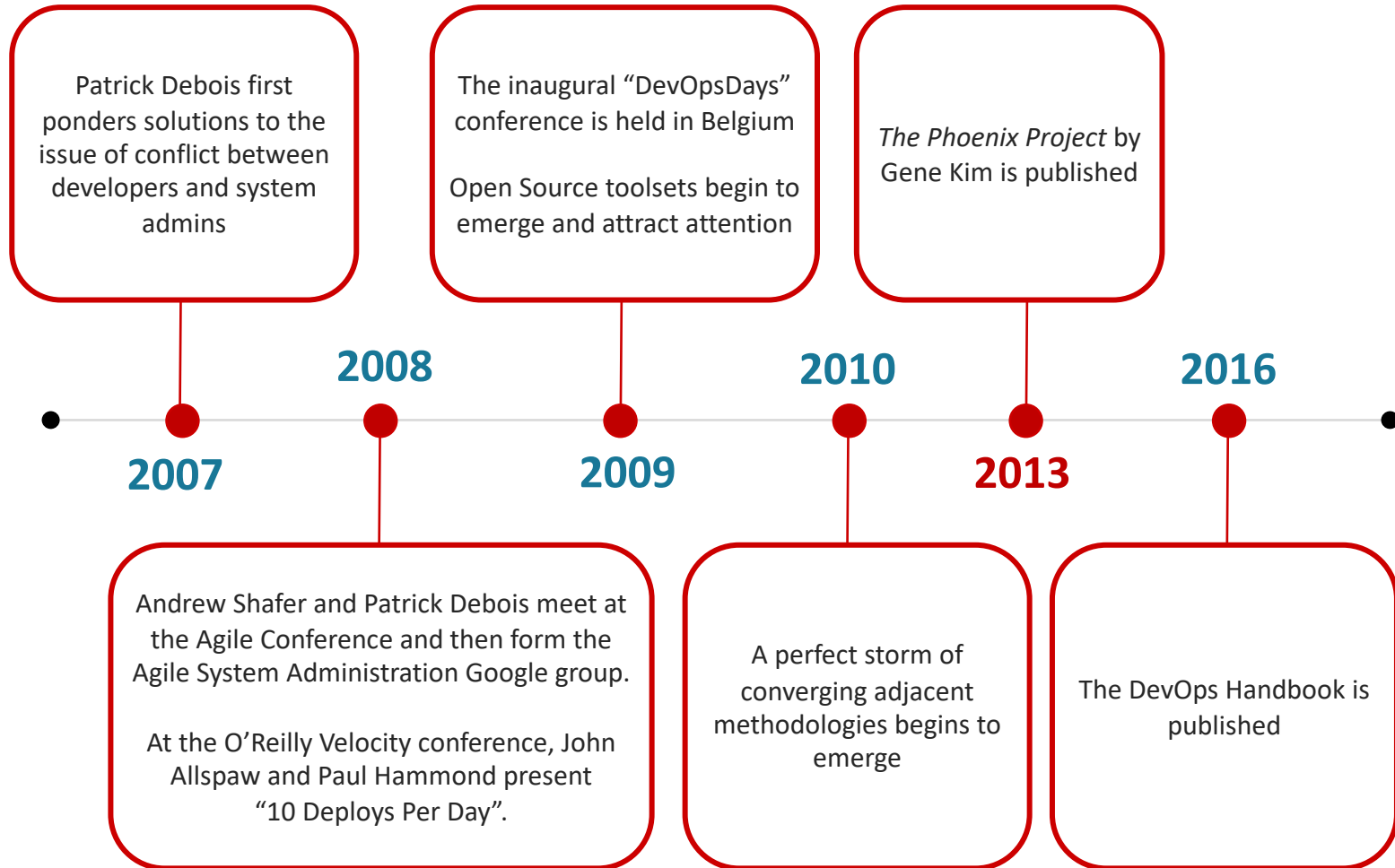
DevOps Is Not:

- An adjective to describe a specific job title or type of team
- Only applicable to start-ups or web applications already suited to it
- A way to eliminate IT Operations
- A collection of tools that focus on automation without the corresponding cultural shift
- Lacking the flexibility required to be workable in a regulated environment

DevOps Fundamentals



The History Of DevOps



For more information, check out this video:

The History of DevOps, <https://www.youtube.com/watch?v=o7-luYS0iSE>



DevOps Across Industries



While web start-ups like Spotify, Netflix and Amazon were some of the obvious early pioneers of DevOps, it can be and has been implemented successfully at all kinds of organizations – large and small, flexible and rigidly regulated or structured, new and old, in all kinds of industries.

Retailers like Walmart, Target and Starbucks have embraced DevOps as a way to stay technically innovative and remain competitive. Schools like Stanford have turned to DevOps as a way to transform as online universities and extensive use of e-Learning become the norm. Even the U.S. government has made investments in DevOps, with U.S. Customs and Border Protection adopting it in addition to the Department of Justice and Federal Reserve! DevOps has even helped NASA to dream bigger and continue to work towards sending us to Mars and beyond. As DevOps is becoming more mainstream, the list of enterprises introducing DevOps programs has dramatically grown.

For more information, check out this video:

What Is DevOps? <https://www.youtube.com/watch?v=bYQhIpa9eoc>



The DevOps Full Stack

