Introduction

介绍

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DevOps, until recently, has been a story about unicorns: innovative,

engineering-driven online tech companies like Flickr, Etsy, Twitter,

Facebook, and Google. Netflix and its Chaos Monkey. Amazon

deploying thousands of changes per day.

直到最近，DevOps还是一个关于独角兽的故事：创新，工程驱动的在线科技公司，如Flickr，Etsy，Twitter，Facebook和谷歌。Netflix和它的混沌猴子。亚马逊每天部署数千个变更。

DevOps was originally all about WebOps at cloud providers and online Internet startups. It started at these companies because they had to find some way to succeed in Silicon Valley’s high-stakes,build fast, scale fast, or fail fast business environment. They found new, simple, and collaborative ways of working that allowed them to innovate and learn faster and at a lower cost, and to scale much more effectively than organizations had done before.

DevOps最初都是关于云提供商的WebOps和网络初创企业。之所以从这些公司开始，因为他们必须想办法在硅谷高风险、快速创建、快速扩展或快速失败的业务环境中取得成功。他们发现新的、简单的、协作的工作方式，使他们能够以较低的成本更快地创新和学习，并比以前的组织更有效地扩大规模。

But other enterprises, which we think of as “horses” in contrast to the internet unicorns, are under the same pressure to innovate and deliver new customer experiences, and to find better and more efficient

ways to scale—especially in the financial services industry. At

the same time, these organizations have to deal with complex legacy

issues and expensive compliance and governance obligations. They

are looking at if and how they can take advantage of DevOps ideas

and tools, and how they need to adapt them.

但其他企业，我们认为是“马”，而不是互联网独角兽，也面临着同样的创新压力和提供新的客户体验，并发现更好、更高效的扩张方式，尤其是在金融服务业。与此同时，这些组织必须处理复杂的遗留问题和昂贵的合规和治理义务。他们正在研究他们是否以及如何利用DevOps的概念和工具，以及他们需要如何去适应。

This short book assumes that you have heard about DevOps and

want to understand how DevOps practices like Continuous Delivery

and Infrastructure as Code can be used to solve problems in financial

systems at a trading firm, or a big bank or stock exchange or some other financial institution. We’ll look at the following key ideas

in DevOps, and how they fit into the world of financial systems:

这本短简短的书假设你听说过DevOps和想了解DevOps的实践，如持续交付、

础设施作为代码等可以用来解决交易公司、大银行、证券交易所或其他金融机构的金融系统的问题。我们将研究DevOps中的以下关键思想，以及它们如何适应金融系统的世界：

1. Breaking down the “wall of confusion” between development

and operations, and extending Agile practices and values from

development to operations—and to security and compliance

too.

1．打破开发和运营之间的“困惑之墙”，将敏捷实践和价值观从开发拓展至运营，以及安全与合规。

2. Using automated configuration management tools like Chef,

Puppet, and Ansible to programmatically provision and configure

systems (Infrastructure as Code).

2．使用自动化配置管理工具，如Chef、Puppet和Ansible，以编程方式提供和配置系统（基础设施代码）。

3. Building Continuous Integration and Continuous Delivery (CI/CD) pipelines to automatically build, test, and push out changes, and wiring security and compliance into these pipelines.

3. 构建持续集成和持续交付（CI/CD）流水线来自动构建、测试和推出变更，并将安全性和合规性也连接到这些管道中。

4.Using containerization and virtualization technologies like Docker and Vagrant, and infrastructure automation platforms like Terraform and CloudFormation, to create scalable Infrastructure,Platform, and Software as a Service (IaaS, PaaS, and SaaS) clouds.

4．使用容器化技术和虚拟化技术，如Docker和Vagrant以及基础设施自动化平台，像Terraform和CloudFormation，来创建可扩展的基础设施、平台和软件即服务（IaaS、PaaS和SaaS）云。

5. Running experiments, creating fast feedback loops, and learning

from failure—without causing failures.

5. 运行实验、创建快速反馈循环和从失败中学习，当然前提是没有引起故障。

To follow this book you need to understand a little about these ideas

and practices. There is a lot of good stuff about DevOps out there,amid the hype. A good place to start is by watching John Allspaw and Paul Hammond’s presentation at Velocity 2009, “10+ Deploys Per Day: Dev and Ops Cooperation at Flickr”, which introduced DevOps ideas to the public. IT Revolution’s free “DevOps Guide”will also help you to get started with DevOps, and point you to other good resources. *The Phoenix Project: A Novel About IT, DevOps, and*

*Helping Your Business Win* by Gene Kim, Kevin Behr, and George Spafford (also from IT Revolution) is another great introduction,and surprisingly fun to read.

为了能理解和跟进这本书，你需要对这些想法和实践有一点了解。有很多关于DevOps的热门参考资料。一个好的开始是看John Allspaw和Paul Hammond在Velocity 2009上的演讲，“每日部署10+：Flickr的开发和运营合作”，该演讲向公众介绍了DevOps的概念。来自IT革命组织的免费“DevOps指南”还可以帮助您开始使用DevOps，并将您指向其它很好的资源。由同样来自IT革命组织的Gene Kim、Kevin Behr和George Spafford合著的《凤凰计划：一本关于IT、DevOps和帮助您赢得业务的小说》是一本巨著，并且读起来很有趣。

If you want to understand the technical practices behind DevOps,

you should also take the time to read *Continuous Delivery* (Addison-

Wesley), by Dave Farley and Jez Humble. Finally, *DevOps in Practice*

is a free ebook from O’Reilly that explains how DevOps can be

applied in large organizations, walking through DevOps initiatives

at Nordstrom and Texas.gov.

如果您想了解DevOps背后的技术实践，您还应该花点时间阅读由Dave Farley和Jez Humble合著，Addison-Wesley出版的《持续交付》。最后，来自O'Reilly的免费电子书《实践中的DevOps》，通过在Nordstrom和Texas.gov的实施DevOps的实践，解释了DevOps如适用于大型组织。