



Course Outline – DevOps Foundation

This EXIN DevOps Foundation certification has been designed to give IT and business professionals basic knowledge and understanding of DevOps. Created as a stepping-stone to the EXIN DevOps Professional certification, this certification confirms understanding the origins of DevOps and the benefits of DevOps principles and practices for the organization.

The word DevOps is a contraction of 'Development' and 'Operations'. DevOps is a set of best practices that emphasizes the collaboration and communication of IT and business professionals in the lifecycle of applications and services. DevOps changes how individuals think about their work; DevOps values the diversity of work done, as well as the diversity of the people doing it. DevOps supports intentional processes that accelerate the rate by which organizations establish value and DevOps measures the effect of social and technical change. DevOps is a way of thinking and a way of working that enables individuals and organizations to develop and maintain sustainable work practices.

This certification focuses on building basic knowledge, enabling a professional to work within a DevOps environment and recognize the benefits DevOps may bring to their organization.

The EXIN DevOps Foundation certification has been developed in cooperation with experts in the DevOps work field.

The course consists of 2 days of instructor-led training and 60 hours of self-study exam preparation.

Objectives

After taking this course, you should be able to:

- Describe the origins of DevOps
- Define DevOps
- Describe the reasons to use, as well as misconceptions about, DevOps
- Describe the DevOps principles of Value Stream, Deployment Pipeline, Version Control, Configuration Management and Definition of Done
- Describe the differences between traditional and DevOps practices
- Describe the practical applications and limitations of DevOps

Course Outline

DevOps Basics

- DevOps Origins
 - Describe the historical developments from Waterfall to Scrum to Agile
 - Describe the developments in virtualization and cloud computing that enable DevOps
 - Explain how DevOps developed from a historical perspective
- Definition of DevOps
 - Outline how DevOps is an expansion of Lean and Agile thinking
 - Explain that DevOps requires value stream thinking
 - Clarify how DevOps can yield a greater return on IT than other practices

- Reasons for using DevOps
 - Identify decreasing time to market as a reason for using DevOps
 - Identify reducing technical debt as a reason for using DevOps
 - Identify eliminating fragility as a reason for using DevOps
- Misconceptions about DevOps
 - Clarify that DevOps is not a part of Agile
 - Clarify that DevOps is more than tools and automation
 - Clarify that DevOps is not a new profession

DevOps Principles

- Value Stream
 - Define the concept value stream
 - Explain the concept of value stream mapping (VSM)
 - Clarify how value stream mapping may help optimizing processes in the business
 - Explain why value stream thinking is the core of DevOps
- Deployment Pipeline
 - Define the concept deployment pipeline
 - Identify the challenges when implementing a deployment pipeline
- Version Control
 - Define the concept version control
 - Explain why version control is important
- Configuration Management
 - Define the concept configuration management
 - Explain why configuration management is important for DevOps
- Definition of Done
 - Explain why a clear Definition of Done is important for working with a DevOps mindset

DevOps Key Practices

- Difference with traditional practices
 - Clarify how DevOps facilitates more frequent releases
 - Clarify how DevOps focuses more on adding value to the business
 - Explain the DevOps requires automation
 - Clarify how DevOps deals with solving incidents and defects differently
 - Clarify how DevOps needs continuous improvement
- DevOps Practices
 - Outline the importance of a diverse team
 - Outline the importance of visualizing work
 - Outline why Work in Progress (WiP) and batch sizes should be limited
 - List how DevOps incorporates operational requirements into development
 - Explain the importance of supporting innovation
 - Identify ways to deal with bottlenecks

Practical Applications of DevOps

- Applicability
 - Characterise situations in which DevOps is feasible
 - Identify conditions that make adoption of DevOps interesting for the business
- Limitations
 - Identify a lack of readiness to adopt DevOps
 - Characterise monolithic IT infrastructure and architecture as a limitation for adopting DevOps
- Using Commercial, Off the Shelf Software
 - Clarify the risk of commercial off the shelf software in strategic business lines
 - Identify solutions for working with commercial off the shelf software when there is no other option

- Evolving Architecture and Organisational Models
 - Identify the difficulties a rigid IT department poses on implementing DevOps
 - Characterise the need for a flexible mindset to change and innovation
- Iterative Progression
 - Recall that DevOps may start small and can be built up from there
 - Recall that DevOps is a way of thinking which may start anywhere in the organisation

Who Should Attend?

EXIN DevOps Foundation is ideal for IT and business professionals who want to understand DevOps and how their organization can benefit from its principles. This includes those who participate in a DevOps team and anyone engaged in information and technology management.

Associated certifications

- DevOps Foundation

NIL – More than Just a Training Company

NIL Learning gives you knowledge and skills that accelerate the growth of your competencies. You'll gain direct benefits from our theoretical expertise and practical experiences. We provide proven competencies and long tradition, along with insight into present and future challenges and trends.

Since 1992, NIL has been at the forefront of advanced contributors to strategic partner Cisco's technologies, learning curriculum and value-added solutions deployed to clients around the globe.

NIL Learning is part of [NIL Ltd](#), a leading global IT solutions and services provider. NIL is headquartered in Slovenia, with regional offices and representatives in Croatia, India, Macedonia, Morocco, Saudi Arabia, Serbia, South Africa, United Arab Emirates and the U.S.

Why learn at NIL LEARNING?

- You will gain relevant and job-ready skills
- You will get more than just standard content – our instructors augment the courses with practical and useful examples from real-life situations
- You can attend a training onsite or remotely; and save time and money on accommodation and travelling
- You can choose from a full range of standard and advanced courses
- We can customize a training to your specific needs or develop it for you
- Worldwide training delivery
- High customer satisfaction
- All NIL LEARNING instructors are field-proven experts - each both active engineer and instructor
- NIL LEARNING enhances the standard learning curriculum with real-life experience and helps clients to maximize their training investment
- NIL LEARNING runs a centralized training schedule across the whole EMEAR region
- NIL received Cisco Global Learning Partner of the Year 2018 - Collaborator Award

More Info

Slovenia (Headquarters)

T: +386 1 4746 500

E: sales-support@nil.com

Saudi Arabia

T: +966 1 465 4641

E: info.nilme@nil.com

Croatia

T: +385 (0)51 583 255

E: info-nilcroatia@nil.com

Serbia

T: +381 11 420 9530

E: info-nilserbia@nil.com

India

T: +91 991 645 1647

E: sales-support@nil.com

South Africa

T: +27 10 475 0050

E: measales@nil.com

Macedonia

T: +389 7 522 3880

E: sales-support@nil.com

UAE

T: +971 508 023 392

E: info.nilme@nil.com

Morocco

T: +212(0) 660 808 394

E: info-nilmorocco@nil.com

USA

T: +1 651 888 6598

E: info-nilusa@nil.com

France

T: +966 1 465 4641

E: info.nilme@nil.com

learning.nil.com