

D A S A

DEVOPS AGILE
SKILLS ASSOCIATION

DASA DEVOPS PROFESSIONAL: ENABLE AND SCALE

Syllabus

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January 2019

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Previous	1.0.0	October 2018
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SCOPE AND PURPOSE OF THIS DOCUMENT

The purpose of this document is to inform all parties interested in the DASA DevOps Professional: Enable and Scale course of the areas covered in the course.

THE DASA DEVOPS COMPETENCE MODEL

The DevOps Agile Skills Association (DASA) competence framework identifies 8 knowledge areas and 4 skills that are relevant in DevOps, as shown in the following figure.

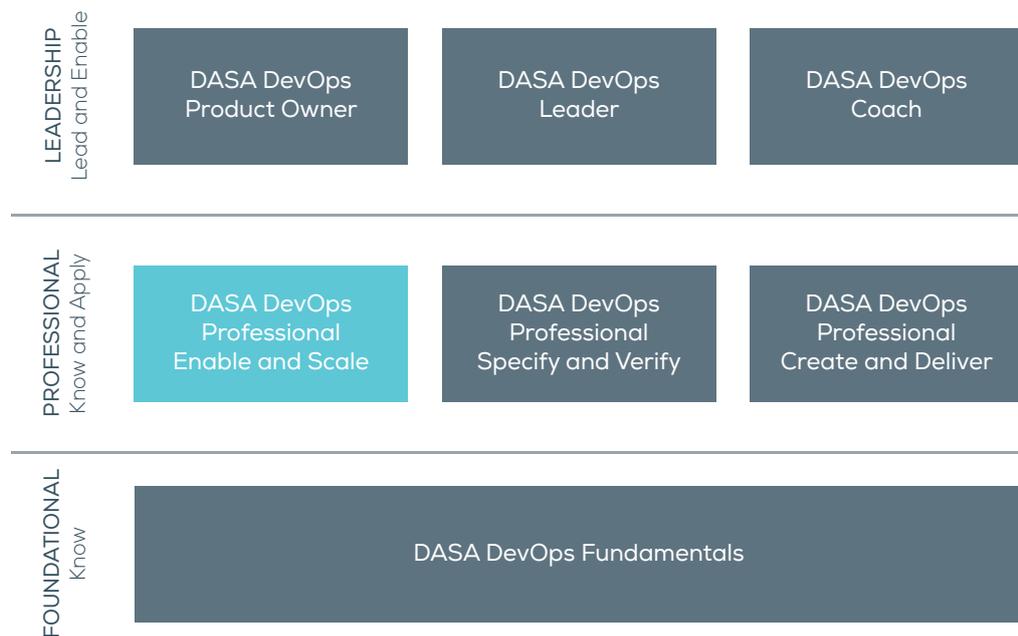


1. Novice / 2. Competent / 3. Proficient / 4. Expert / 5. Master

Every individual operating in a DevOps team requires to be competent at all 8 knowledge areas and proficient at the 4 skill levels. For DevOps teams to be effective, they require all 12 areas to be at the Expert level. Individual team members can specialize in specific areas, in order for teams to achieve these capabilities.

DASA DEVOPS PROFESSIONAL: ENABLE AND SCALE

This 2-day course builds upon the DASA DevOps fundamentals. The key focus of DASA DevOps Professional: Enable and Scale is on the four skill areas that have been defined by DASA and are required for successful DevOps results. The course helps you know why the four skills: courage, teambuilding, leadership, and continuous improvement, are the necessary skills for a DevOps environment.



DASA DevOps Professional: Enable and Scale is designed to provide the core education necessary to put DevOps into practice. With the help of DevOps theory, pragmatic examples and exercises, and interactive group discussions, the course will help you understand how to apply the necessary skills to practice DevOps.

QUALIFICATION OBJECTIVES

When you have acquired the required knowledge from this course, you will be able to:

- Explain the importance of DevOps culture and the aspects that can influence it.
- Explain why courage, teambuilding, leadership, and continuous improvement are required in a DevOps environment.
- Explain why courage is essential to enable trust, honesty, and experimentation.
- Identify and evaluate different types of behavior in a DevOps environment.
- Recognize the signals indicating impediments and/or team dysfunctions.
- Describe how to form good DevOps teams and assess their maturity.
- List the effects of happiness and motivation on team performance.
- Identify how leaders encourage feedback and transparency.
- Discuss the factors that leaders can influence to build trust.
- Explain how and why leaders promote a "Safe to fail" environment.
- Analyze value streams to improve throughput and flow.
- Facilitate the tools for continuous improvement: structured problem-solving workshops, Story Mapping sessions, and retrospectives.

HOW DOES DASA DEVOPS PROFESSIONAL: ENABLE AND SCALE FIT INTO THE DASA COMPETENCE FRAMEWORK?

After completing this course, you will cover the area marked as DASA DevOps Professional: Enable and Scale in the following figure of the DASA qualification scheme. As a result, you will reach the “Proficient” level of the scheme.



1. Novice / 2. Competent / 3. Proficient / 4. Expert / 5. Master

TARGET AUDIENCE

The DASA DevOps Professional: Enable and Scale certification is primarily aimed at:

- The DASA DevOps Professional: Enable and Scale certification is primarily aimed at:
- Individuals involved in IT development, IT operations, or IT Service Management
- Individuals whose role are affected by DevOps and continuous delivery, such as:
 - ◇ DevOps Engineers
 - ◇ Product Owners
 - ◇ Integration Specialists
 - ◇ Operations Managers
 - ◇ Incident and Change Managers
 - ◇ System Administrators
 - ◇ Network Administrators
 - ◇ Business Managers
 - ◇ Automation Architects
 - ◇ Enterprise Architects

COURSE REQUIREMENTS

Required: DASA DevOps Fundamentals certificate

Beneficial: Basic familiarity with Agile, Scrum, Lean, and ITSM principles

CERTIFICATION REQUIREMENTS

You will receive the required certification from DASA on successful completion of the DASA DevOps Professional: Enable and Scale exam.

EXAM DETAILS

The characteristics of the DASA DevOps Professional: Enable and Scale exam are:

Exam Format:

- Closed-book format
- Web-based
- Participants can bring scratch paper

Questions:

- 12 multiple choice questions

Passing Score:

- 60% (36 points to be scored out of 60)

Exam Duration:

- 45 minutes
- 15 minutes extra time for non-native English speakers

LEARNING OUTCOMES

A classification widely used when designing assessments for certification and education is the Bloom's Taxonomy of Educational Objectives. This classifies learning objectives into six ascending learning levels, each defining a higher degree of competencies and skills. (Bloom 1956 Taxonomy of Educational Objectives).

This structured approach helps to ensure:

- A clear delineation in learning level content between different qualification levels
- Learning outcomes are documented consistently across different areas of the guidance
- Exam questions and papers are consistent and are created to a similar level of difficulty.

The Professional qualification examines learning outcomes at levels 1 (knowledge), 2 (comprehension), and 3 (Application).

DASA DEVOPS PROFESSIONAL LEARNING OUTCOMES				
	1 Knowledge	2 Comprehension	3 Application	4 Analysis
Generic Definition from Learning Outcomes	Know key facts, terms and concepts from the manual/guidance	Understand key concepts from the manual/guidance	Be able to apply key concepts for a given scenario	Be able to analyze and distinguish between appropriate and inappropriate use of the method/guidance for a given scenario situation
Qualification Learning Outcomes	Know facts, including terms, concepts, principles, tools, and techniques from the DASA DevOps Professional: Enable and Scale curriculum	Understand the concepts, principles, and dimensions of DevOps and can explain how these are applied		

SYLLABUS AREAS

COURSE INTRODUCTION

This module lets learners know about the course, such as a brief overview, certification, and training agenda.

TEAMBUILDING

Teambuilding is about understanding the other's point of view, collaboration, mutual accountability, common purpose, and the ability to integrally support the service/product.

Design Teams:

- Characteristics of a DevOps team
- Skills of a DevOps Team
- Self-organization and autonomy
- Rules to consider when designing DevOps teams

Build Teams:

- Effects of Happiness and Motivation on Performance
- Feedback
- Creating high-performance teams

Governance:

- Governance within teams
- Governance between multiple teams
- Governance between organizations
- DevOps contracts

DEVOPS LEADERSHIP

This module describes how to facilitate teams to high performance, DevOps behaviour, transparency, and a service lifecycle mindset.

Build Culture:

- Creating the right environment
- Providing vision and purpose
- Stimulating the right behavior
- Servant leadership: giving control
- Servant leadership: supporting and inspiring

Create Purpose:

- Defining and aligning purpose
- Purpose of having a purpose
- Alignment versus autonomy

Be a Servant Leader:

- Give Control to the Team
- Inspire and Support the Team

Focus on Success:

- Output versus outcome
- Measuring and steering

COURAGE

The Courage module is about coaching courageous behavior, proactivity, reflection, trust, open discussions, experimentation, fail fast, and the courage to change.

Build Courage:

- The importance of courage
- Courage in relationship with experimentation
- Trust in relationship with courage
- Resilience, be ready for the unexpected
- Courage in relationship with Leadership and feedback
- Enabling courage at team level
- Dealing with Failure

Think Different:

- Courage day to day
- Encourage critical thinking
- Out of your comfort zone
- Techniques to promote courageous behavior

VALUE – CUSTOMER-CENTRIC ACTION

This module describes the important aspects that are relevant to identify and deliver the required and expected value for all relevant stakeholders.

Aspects of Value and Managing Expectations:

- The different aspects of value
- Stakeholder management
- Customer collaboration and using customer feedback

Value and Prioritization

- How to do prioritization

CONTINUOUS IMPROVEMENT

Continuous improvement describes the importance of a Kaizen mindset, quality at the source, first time right, knowledge-sharing, and the ability to adapt.

Build Flow:

- Understanding the Importance of Flow
- Using Lean to optimize flow
- Kaizen as a mindset
- Radical change versus Kaizen
- Using Pull to optimize flow

Continuous Improvement Tools:

- Kaizen Event
- Value Stream Mapping
- Visual Management
- Retrospective
- Daily Standup
- Five Times Why

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