

# DASA DEVOPS COACH

Syllabus

Version 1.3.0

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| Previous | 1.2.0   | November 2020 |
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| Next     | TBD     | TBD           |

# SCOPE AND PURPOSE OF THIS DOCUMENT

The purpose of this document is to inform all parties interested in the DASA DevOps Coach certification of the areas covered in the program.



### DASA DEVOPS COACH

Recent developments have given rise to several concepts in IT methodologies, for example, Agile, Scrum, DevOps, and Lean IT. The ultimate aim of these methodologies is the faster realization of the customer value compared to traditional methods. Like all other hyper-growth trends in our IT industry, DevOps' adoption is also not immune to (or protected from) potential misunderstandings and misconceptions. DevOps predominantly entails a cultural shift towards a new mindset, new behaviors, a new organization, and a new working style besides the relevant tooling and technology component. Organizations that do not truly comprehend DevOps' essence end up with transformational failures, often leading away from DevOps' value. The DASA DevOps Coach qualification extends any professional skills in a DevOps environment to help team members, leadership, and other stakeholders apply DevOps concepts and principles within their organization.

## QUALIFICATION OBJECTIVES

On completion of this knowledge-based certification, you will be able to:

- Outline the value of a DASA DevOps Coach and the associated roles and responsibilities.
- Act according to the DASA DevOps Coaching mindset and apply the related skillsets.
- Apply the four modes of DevOps Coaching (Consulting, Mentoring, Coaching, and Facilitation).



- Develop high-performing teams through coaching skills.
- Comprehend the DevOps transformation journey and serve the organizations to adopt DevOps to succeed in a rapidly changing digital marketplace.

### TARGET AUDIENCE

The DASA DevOps Coach qualification aims at:

- (Lean, Agile, DevOps) Coaches
- Senior Scrum Masters
- DevOps Team Members looking for the coach role
- Change agents
- · Managers and IT leadership
- · Those responsible for an agile initiative

# **COURSE PREREQUISITES**

This leadership course is for experienced professionals who are helping or expected to help their organization through a DevOps transformation journey. The course is relevant for:

- Professionals who have a working knowledge of coaching and hands-on experience in assisting organizations in adopting DevOps principles
- Experienced DevOps professionals who have helped organizations transition to DevOps, preferably guided by the DASA DevOps competence model



- Professionals who have experience in coaching two or more organizations, departments, or programs
- Professionals who have some formal or informal knowledge (or education) about coaching

### CERTIFICATION REQUIREMENTS

You will receive the required certification from DASA on the successful completion of the DASA DevOps Coach exam.

### **EXAM DETAILS**

The characteristics of the DASA DevOps Coach exam are:

#### Exam Format:

- Closed-book format
- Web-based

#### Questions:

 10 multiple-choice questions (MCQs), based on (mini) cases

### Passing Score:

• 65%

#### **Exam Duration:**

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

### LEARNING OUTCOMES

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



of competencies and skills. (Bloom et al, 1956, Taxonomy of Educational Objectives).

This structured approach helps ensure:

- There is clear segregation in learning level content between the different qualification levels.
- Learning outcomes are documented consistently across different areas of the program.
- Exam questions and papers are consistent and are at a similar level of difficulty.

This leadership qualification examines learning outcomes at Bloom levels 1 (Knowledge), 2 (Comprehension), 3 (Application), and 4 (Analysis).

| DASA DEVOPS COACH LEARNING OUTCOMES                   |  |  |   |  |
|---|--|--|---|--|
|   | 1.<br>Knowledge  | 2.<br>Comprehension  | 3.<br>Application   | 4.<br>Analysis   |
| Generic<br>Definition<br>from<br>Learning<br>Outcomes | Know key<br>facts, terms,<br>and concepts<br>from the<br>guidance.                       | Understand the key concepts from the guidance.   | Be able to<br>apply the<br>concepts<br>related to the<br>syllabus area<br>for a given<br>situation. | Be able to<br>analyze and<br>distinguish<br>between<br>appropriate and<br>inappropriate<br>use of a method<br>for a given<br>situation.              |
| Qualification<br>Learning<br>Outcomes                 | Know key facts, including terms, concepts, principles, and techniques from the guidance. | Understand the concepts, principles, and framework of DevOps and can explain how these are applied in the environment. | Be able to use information in a context different from the one in which it is learned.              | Be able to examine and break information into parts by identifying motives or causes, make inferences, and find evidence to support generalizations. |



# **SYLLABUS**

The following tables describe the primary aspects of the DASA DevOps Coach Syllabus.

Module 1: DevOps Journey - A Quick Preview

| Topic                                | Subtopics   | Objective  |
|--------------------------------------|---|--|
| Traditional<br>to Agile to<br>DevOps | <ul> <li>Traditional Development Method –<br/>Characteristics and Complexities</li> <li>Agile Development Method –<br/>Characteristics and Complexities</li> <li>DevOps Way – Characteristics<br/>and Complexities</li> </ul>   | <ul> <li>Reaffirm the fundamentals concepts of DevOps.</li> <li>Establish the complexities of the journey from Traditional to Agile to DevOps.</li> </ul>  |
| Dasa Devops<br>Principles            | <ul> <li>DASA DevOps Core Principles</li> <li>DASA DevOps Principles -         Enablement</li> <li>DASA DevOps Focus Areas</li> <li>DevOps Focus Areas and Aspects         of IT</li> <li>DASA DevOps Competencies to         Enable DevOps Principles</li> <li>Competencies and Focus Areas to         Enable DASA DevOps Principles</li> <li>Competencies and Overall View of         DASA DevOps Certifications</li> <li>Competencies and DASA DevOps         Professional Certifications</li> <li>DevOps Leadership Roles - Coach         vs. Leader</li> </ul> | <ul> <li>Understand the role of a DevOps Coach in navigating through the DevOps journey.</li> <li>Connect the role of a DevOps Coach to the DASA DevOps Principles and bring these to life.</li> </ul> |



# Module 2: DevOps Coach Performance and Change

| Topic                       | Subtopics   | Objective  |
|-----------------------------|---|--|
| Coaching for<br>Performance | <ul> <li>DevOps Coaching - The Ke Dimensions</li> <li>DevOps Coaching for Performance</li> <li>Objective and Key Results (OKRs) - A Performance Framework</li> <li>Measuring the Performance - The DevOps Way</li> <li>Vital Few - Logical Measurement of Initiatives for Success</li> </ul>  | Gain an understanding that DASA DevOps Coaching is about Coaching for Performance and Coaching for Change in an integrated manner. |
| Coaching For<br>Change      | <ul> <li>Coaching for Change - Continuous Delivery Maturity Levels</li> <li>DevOps Coaching - Accelerating Maturity</li> <li>Level of Changes during a Change Journey</li> <li>Change - The Journey from Challenge to Impact</li> <li>Feeling the Dip: Individual Journey of Change</li> <li>Change Cycle (Ascertain the Stages, Questions to Ask, Challenges for the Coach, Mindsets Required for the DevOps Coach)</li> <li>DevOps Coach and Journey of Change for Individuals and Teams</li> <li>DevOps Coach and Organizational Journey of Change</li> <li>Driving the Change as a DevOps Coach</li> <li>A Day in the Life of a DevOps Coach</li> <li>DevOps Coach: Competencies Required to Deal with Multiple Dimensions</li> </ul> | Gain an understanding that DASA DevOps Coaching is about Coaching for Performance and Coaching for Change in an integrated manner. |



Module 3: Being a DevOps Coach

| Topic                        | Subtopics   | Objective   |
|------------------------------|---|---|
| Foundational<br>Competencies | <ul> <li>Presence</li> <li>◇ Coaching Presence</li> <li>◇ Signature Coaching Presence</li> <li>◇ Impact, Considerations</li> <li>◇ Practices</li> <li>◇ The Coach's Presence Zone</li> <li>Listening</li> <li>◇ Levels of Listening</li> <li>◇ Keys to Active Listening</li> <li>◇ Principles of Active Listening</li> <li>◇ Listening Responses</li> <li>◇ Ways of Not Listening</li> <li>◇ Practices</li> </ul> | Understand the foundational skills of a DevOps Coach as per DASA DevOps Competency Framework. |
|                              | <ul> <li>• Questioning</li> <li>♦ Change Cycle</li> <li>♦ Impact</li> <li>♦ Principles</li> <li>♦ Funnel Your Questions for Positive Results</li> <li>♦ Practices</li> <li>• Direct Communication</li> <li>♦ Communication Style Matrix</li> <li>♦ Being a Direct Communicator</li> </ul>   |   |

| Topic                    | Subtopics Objective   |
|--------------------------|---|
| Enabling<br>Competencies | <ul> <li>Contracting</li> <li>Types of Contracts: Business,<br/>Professional, and Psychological</li> <li>Making Professional or</li> <li>Understand the enabling<br/>skills of a DevOps Coach<br/>as per DASA DevOps<br/>Competency Framework.</li> </ul> |
|                          | Psychological Contracting Influencing   |
|                          | <ul> <li>Principles of Persuasion         <ul> <li>(Reciprocity, Scarcity,</li> <li>Authority, Consistency, Liking,</li> <li>and Consensus)</li> </ul> </li> </ul>  |
|                          | Feedback  |
|                          | ♦ Feedback Experience   |
|                          | ♦ Feedback Triggers   |
|                          | <ul> <li>During the Feedback Session</li> </ul>   |
|                          | ♦ COIN Method   |
|                          | ♦ Type of Feedbacks   |
|                          | ♦ Feedback Proportion: Positive<br>vs. Negative   |
|                          | <ul> <li>Setting Up the Feedback</li> <li>Culture - The Attributes</li> </ul>   |

| Topic                                  | Subtopics   | Objective  |
|--|---|--|
| Coaching Modes                         | <ul> <li>Coaching</li> <li>◇ Definition</li> <li>◇ The GROW Model</li> <li>◇ Measuring Coaching Success</li> <li>◇ Coaching Operating Principles</li> <li>◇ Barriers to Coaching</li> <li>Mentoring</li> <li>◇ Definition</li> <li>◇ Learning Centered Mentoring Paradigm</li> <li>◇ Focus on Learning Style</li> <li>◇ Mentoring Techniques</li> <li>◇ Support vs. Challenge</li> <li>◇ The GROW Model</li> <li>Consulting</li> <li>◇ Framework for Decision Making</li> <li>◇ Assessing Complexity</li> <li>◇ The Problem-Solving Cycle</li> <li>Facilitation</li> <li>◇ Benefits of Facilitation</li> <li>◇ Designing and Planning the Event</li> <li>◇ Facilitation Phases</li> <li>◇ Holding the Space</li> <li>◇ During the Facilitation Session</li> </ul> | Discuss the four coaching modes of a DevOps Coach as per DASA DevOps Competency Framework. |
| Switch<br>Between<br>Coaching<br>Modes | <ul> <li>Mapping Coaching Modes to Area of Focus</li> <li>Consulting and Mentoring - Expert Role</li> <li>The Spectrum of Skills - Coaching and Mentoring</li> <li>Mentoring and Coaching in DevOps Context</li> </ul>  | Establish the basis for switching between the modes based on different DevOps situations.  |



# Module 4: Team Coaching

| Topic                               | Subtopics   | Objective  |
|-------------------------------------|---|--|
| DevOps<br>Organization<br>and Teams | <ul> <li>What is an organization?</li> <li>Organization - The Need</li> <li>What is a team?</li> <li>Questions to Ask When Forming an Organization</li> <li>Organizational Structure and Key Principles</li> <li>Microservices Architecture</li> <li>DevOps Organization</li> <li>Autonomy</li> <li>Activity-Focused vs. Product-Focused Teams</li> <li>DevOps Organization - The Pragmatic Approach</li> </ul> | Establish the critical role of teams in a DevOps organization. |
| Team<br>Development                 | <ul> <li>What is team development?</li> <li>Team Performance</li> <li>Stages of Team Development</li> <li>DevOps Activities and Stages of<br/>Team Development</li> </ul>   | Establish the critical role of teams in a DevOps organization. |
| Gemba Walk                          | <ul> <li>What is Gemba?</li> <li>Principles of Gemba Walk</li> <li>Why use Gemba Walk?</li> <li>Benefits of Gemba Walk</li> <li>Gemba Walk - Step by Step</li> <li>Observation: The Source of Gemba Power</li> <li>Methods Leveraged During Gemba Walk (An Introduction)</li> </ul>   | Establish the critical role of teams in a DevOps organization. |

| Topic Subtopics   | Objective   |
|---|---|
| DevOps Team  Oaching  Attributes of a Team Coach  DevOps Team: A Relationship  System | Apply the concepts of team coaching for building high-performing teams. |



# Module 5: DevOps Transformation Journey

| Topic  | Subtopics   | Objective   |
|--|---|---|
| Transformation<br>- The Seven<br>Steps       | <ul> <li>Preparing and Planning for DevOps</li> <li>Step 1: Prepare Business Case</li> <li>Step 2: Map Cost to Value</li> <li>Step 3: Assess As-Is State</li> <li>Step 4: Create a Transformation Plan</li> <li>Step 5: Implement DevOps Tools and Practices</li> <li>Step 6: Focus on Continuous Improvement</li> <li>Step 7: Sustain the Transformed State</li> </ul>   | Apply learnings to build<br>a business case and<br>plan for the DevOps<br>Transformation journey. |
| Value Stream<br>Analysis and<br>Architecture | <ul> <li>Cost to Value Mapping</li> <li>Product Taxonomy -         Organizational Map</li> <li>Defining Product Taxonomy</li> <li>Value Stream</li> <li>Siloed Value Streams to An Integral Value Stream</li> <li>Value Stream Mapping</li> <li>Activity-Based Accounting and Cycle Time Assessment</li> <li>Funding Model</li> <li>Characteristics of DevOps Funding</li> <li>Assessing ROI from DevOps @         Product Level</li> </ul> | Apply learnings to build<br>a business case and<br>plan for the DevOps<br>Transformation journey. |

| Topic                  | Subtopics  | Objective  |
|------------------------|--|--|
| Automation and Tooling | <ul> <li>Value Stream Architecture Tenets</li> <li>Value Stream Architecture</li> <li>Focus on Automation to Deliver Values</li> <li>Automation</li> <li>Continuous Delivery Implies: Software has to Flow</li> <li>Types of Tools for Continuous Delivery</li> <li>DevOps Tools</li> <li>Software Development Lifecycle (SDLC) Process</li> <li>Considerations for Adopting Tools</li> <li>Considerations for Selecting DevOps Tools</li> </ul> | Apply learnings to build a business case and plan for the DevOps Transformation journey. |



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