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Sign up

AIOps Foundation Training

2 days (14 hours)

Overview

AIOps (Artificial Intelligence for IT Operations) is a modern approach to IT operations management that combines Big Data, Machine Learning, and Generative AI. Faced with the explosion in the volume of operational data and the complexity of cloud-native environments, it enables the automation of actions and a shift from a reactive monitoring model to a proactive one.

Our AIOps Foundation training will help you understand the AIOps philosophy, master the collection and analysis of massive data (the 5 Vs), and grasp how machine learning algorithms work for anomaly detection. You will discover how to effectively reduce IT alert noise and eliminate repetitive tasks in synergy with DevOps and SRE practices.

By the end of the course, you will be able to understand real-world use cases for AIOps, measure its impact using key indicators (SLOs, DORA metrics), and design an effective and ethical implementation strategy within your organization. This course actively prepares you to take the official AIOps Foundation certification exam.

Objectives

- Understand the history, origins, current landscape, and stages of evolution of an AIOps system.
- Master the key concepts of the core technologies of AIOps: Big Data (the 5 Vs) and Machine Learning (supervised vs. unsupervised models, generative AI).
- Understand how AIOps interacts with other technical domains and business methodologies the enterprise (DevOps, SRE, Cybersecurity).
- Identify and analyze concrete use cases for AIOps and understand the shift in organizational mindset (from deterministic to probabilistic).
- Measure and evaluate the impact of AIOps deployment using operational indicators (SLOs/SLIs) and industry performance metrics (DORA metrics).
- Understand the practical challenges, deployment strategies, data governance, and ethical considerations when implementing AIOps within the organization.

Target Audience

- Web developers and DevOps engineers
- SRE (Site Reliability Engineering) engineers and system administrators
- IT Operations Managers and Operations Directors (ITOM/ITSM)
- Technical Project Managers and Cloud Architects

Prerequisites

- Basic understanding of IT operations management (monitoring, incident management).
- Basic familiarity with cloud concepts and DevOps or SRE culture.
- No technical prerequisites in coding or advanced mathematics are required for this Foundation level.

Software Prerequisites

- A modern web browser with internet access to participate in workshops on the cloud simulation platform
- A messaging or collaboration tool for group exercises

AIOps Foundation Training

[Day 1 - Morning]

Introduction, Fundamentals, and the AIOps Ecosystem

- History of AIOps, Predecessors, and Market Adoption Factors
- What is AIOps? Definition, philosophy, and distinction from ITOA
- The stages of maturity and evolution of an AIOps system
- Synergy with other practices: AIOps and DevOps, AIOps and SRE, AIOps and Security
- Hands-on Workshop: Analyzing and mapping the current operational maturity of a typical infrastructure and identifying bottlenecks suitable for AIOps.

[Day 1 - Afternoon]

Technologies at the Heart of AIOps: Data (Big Data)

- What is Big Data in the context of operations? The 5 Vs of operational data
- Types and Sources of AIOps Data: Metrics, Logs, Traces (Observability), and Events
- Data Lifecycle: From Raw Collection (Ingestion) to Processing by the AIOps Platform
- Hands-on Workshop: Simulation of massive observability data flows, classification of data types, and identification of noise reduction mechanisms.

Technologies at the Heart of AIOps: Artificial Intelligence and Machine Learning

- Basic AI Concepts and the Role of Machine Learning (ML)
- How ML Models Learn: The Difference Between Supervised and Unsupervised Learning Applied to Anomalies
- The Rise of Large Language Models (LLMs) and Generative AI in Root-Cause Analysis (Root-Cause Analysis)
- Future developments in AI for automated incident remediation
- Hands-on workshop: Using a visual predictive analytics tool to detect abnormal behavior (anomalies) in historical system metrics.

[Day 2 - Morning]

AIOps Use Cases and Organizational Posture

- Replacing Manual Processes with Intelligent Automation
- The shift in team posture: Moving from a reactive approach to a proactive model
- Changing the Logic: From Deterministic Reasoning (Fixed Rules and Thresholds) to Probabilistic Reasoning
- In-depth review of key use cases (alert correlation, early anomaly detection, response automation)
- Hands-on workshop: Scenario planning for the transition from a monitoring center (alert fatigue) to an AIOps-driven workflow (probabilities of failures and resolution suggestions).

[Day 2 - Afternoon]

Impact Assessment: Metrics and Performance

- Using industry standards to quantify AIOps results
- Direct correlation with DORA metrics (Deployment frequency, MTTR, failure rate)
- Integrating AIOps into service level management: SLAs, SLOs, and SLIs
- Continuous improvement of AI model accuracy and overall system visibility
- Hands-on Workshop: Building an AIOps Value Management Dashboard and Calculating ROI Based on MTTR (Mean Time to Resolution) Reduction

Implementation Strategies, Challenges, and Ethics

- Development of a clear, documented AIOps strategy that has been approved by stakeholders
- Managing cultural change and supporting IT teams in upskilling
- Data governance and algorithmic bias
- Common pitfalls leading to the failure of an AIOps initiative and criteria for selecting tools
- Hands-on workshop: Final case study on deploying an AIOps initiative in a company (strategy, governance, risks), followed by a practice quiz to prepare for the official certification exam.

Target Audience

This training is intended for both individuals and companies, large or small, seeking to train their teams in new advanced IT technologies or to acquire specific business knowledge or modern methodologies.

Entry-level assessment

The pre-training assessment complies with Qualiopi quality standards. Upon final registration, the learner receives a self-assessment questionnaire that allows us to evaluate their estimated proficiency in various types of technologies, as well as their expectations and personal goals regarding the upcoming training, within the limits imposed by the selected format. This questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could pose challenges for monitoring and ensuring the smooth running of the training session.

Teaching Methods

Practical Course: 60% Practical, 40% Theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the trainer, supported by examples and reflection sessions, and group work.

Assessment

At the end of the session, a multiple-choice questionnaire is used to verify that the skills have been properly acquired.

Certification

A certificate will be issued to each trainee who has completed the entire training program.

Training organization registered under number 11 75 54743 75. This registration does not constitute state accreditation.
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