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Observability Foundation - accredited training with exam

Microservices and cloud-native architectures have been goals of many organizations to help increase speed and agility, but as complexity grows, systems become increasingly challenging to build observability best practices.

Observability Foundation introduces a range of best practices for building full-stack observability towards advancing resilience in a distributed ecosystem. These best practices include building meaningful traces across temporal topologies, the impact of DevSecOps and AIOps on observability, and a 360-degree view of building mature observability practices.

THE AIM OF A TRAINING PROJECT:

- This course introduces a range of practices for advancing resilience and how to architect end-to-end Observability for Cloud-Native applications.   The advantages of building full-stack metrics, events, logs, and distributed tracing are introduced, along with the impact of DevSecOps on Observability and how AIOPs enhance Observability capabilities. This course also covers how Network and Security Observability plays a key role in building reliability, the key aspects of security operations and automated responses are covered,
- The course aims to equip participants with the practices, methods, and tools to engage people across the organization involved in Observability by using real-life scenarios and case stories. Upon completion of the course, participants will have tangible takeaways to leverage situations such as
- implementing MELT models effectively, that fit their organizational context, building distributed tracing and resiliency by design.
- The course is developed by leveraging key experts in

the fields of telemetry, sources of knowledge and engaging with thought-leaders in the Observability space, and working with organizations who have crossed the chasm of modern Observability to extract real-life best practices.
- This course positions learners to successfully complete the Observability Foundation certification exam.

Training recipients

The target audience for the Observability Foundation course are professionals including:
- Anyone focused on large-scale service scalability and reliability
- Anyone interested in modern IT leadership and organizational change approaches
- Business Managers
- Business Stakeholders
- Change Agents
- Consultants
- DevOps Practitioners
- IT Directors
- IT Managers
- IT Team Leaders
- Product Owners
- Scrum Masters
- Software Engineers
- Site Reliability Engineers
- System Integrators
- Tool Providers

Benefits

Benefits for Individuals
- Understanding of practical implementation of Observability, traces, spans, and their correct interpretations
- Designing Observability in services for higher security and reliability
- Building fault-tolerant distributed ecosystems that can be tested for risks of disaster

- Building AIOps intelligence in operations using the Observability pipeline
- Understanding of other roles and contributing towards creating a better workplace culture

Benefits for Organizations

- Implementing Observability effectively leads to higher business value, enhanced stability and reliability of services
- Improvement in product development, deployment, and operations life-cycle
- Increased balance between technical investment in reliability and customer experience
- Homogenous culture and greater synchronization between product, development, and operational teams improving staff morale

Training program

1. Module 1: Exploring Observability
   - What is Observability?
   - MELT
   - Importance of Observability
   - Why Traditional Monitoring is not Enough
   - Observability Maturity Model
   - Challenges with Observability
2. Module 2: Pillars of Observability
   - Defining telemetry
   - The Three Pillars of Observability – Logs, metrics, and traces
   - Distributed Traces
   - Parts of a Trace
   - Tracing: Error Diagnosis
3. Module 3: Open Source Landscape for Observability
   - What is Observability made of?
   - OpenTelemetry
   - OpenTelemetry Libraries
   - OpenTelemetry Agents & Collection
   - The Rest of the Open Source Ecosystem
4. Module 4: Service Maps and Topology
   - Service maps
   - Topology
   - Time Travel Topology
   - Escalation Graphs
   - The 4 Ts
5. Module 5: DataOps Helps Get Observability Right
   - Observability and the Data Paradox

- - Why Observability need DataOps
  - Data Ownership and Governance
  - Data Privacy & Observability
  - Data Confidentiality, Integrity & Availability
  - Maintaining CIA Triad
6. Module 6: Building Observability with AIOps
   - What is AIOps
   - AIOps Platforms
   - Enterprise Platform for AIOps
   - AI/ML Use Cases
   - Auto-Instrumenting Optimization
   - Feedforward CI/CD into AIOPs
   - Feedback AIOps into Quality Gates
7. Module 7: Security and Networking with Observability
8. ● Observing Security
   - Monitoring Security with eBPF
   - Container Security
   - Network Observability
   - Visibility and Integration of various sources
9. Module 8: Observability Practices for DevOps and SRE
   - Observability Indicators
   - Dashboards and Visualization
   - Chaos Engineering

Expected preparation of the participant

It is highly recommended that learners attend the SRE Foundation course with an accredited DevOps Institute Education Partner and earn the SRE Foundation certification prior to attending the Observability Foundation course and exam. An understanding and knowledge of common SRE terminology, concepts, principles and related work experience are recommended.

Training Includes

- Access to a platform with accredited training materials
- Voucher for the Observability Foundation online exam

Additional options:

- Take2 re-sit exam: 200 zł

Attention: purchasing this option is only possible through Altkom Academy before the training.

Language

- Training: English
- Materials: English
- Exam: English

Examination method

The participants receive vouchers, which are valid for 6 months, for online exam.
Having completed the training, the participant receives an e-mail with guidelines how to register on the exam. The date is determined directly with PeopleCert, with the use of participant's account.
Online exam is conducted in the presence of proctor – a person from PeopleCert, who connects remotely with training participant's desktop and observes the course of exam via Internet camera.
The person who takes the exam is obliged to show the place where he is going to write the exam to proctor via Internet camera. Proctor checks if there are not any other persons and study aids in the room.

Duration

2 days / 16 hours

Examination description

Observability Foundation exam:
- exam duration 60 minutes
- 40 multiple-choice questions
- Required 65%, 26 correct answers
- Opened book