



MICROSOFT TRAINING

Building Microservice Platforms With Tars Lfs153x

Learn to build robust microservice platforms using Tars LFS153X. Develop scalable, resilient applications and master distributed system design.

DURATION

24 Hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

The "Building Microservice Platforms With Tars Lfs153x" course is meticulously designed for intermediate-level IT professionals eager to master the architecture, development, and deployment of scalable, robust microservice platforms using the TARS framework. Developed by Tencent and contributed to the Linux Foundation, TARS is an open-source, high-performance RPC framework that simplifies the creation and governance of distributed services. This comprehensive program delves into the core principles of microservices, demonstrating how TARS provides an end-to-end solution for service definition, development, testing, deployment, and operational management. Participants will gain hands-on experience in building complex distributed systems, ensuring high availability, fault tolerance, and efficient resource utilization.

Through practical exercises and real-world scenarios, attendees will learn to leverage TARS' powerful features such as service governance, observability, and automatic scaling capabilities. Mastering TARS is a strategic advantage for developers, architects, and DevOps engineers looking to build next-generation cloud-native applications. This certification equips you with the in-demand skills to design and implement resilient microservice architectures, significantly enhancing your professional value in today's rapidly evolving technological landscape. Whether you aim to optimize existing systems or spearhead new distributed projects, this course provides the expertise needed to excel.

Duration	24 Hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Introduction to Microservices and TARS Foundations

- Understanding Microservice Architecture Principles
- Comparison: Monolithic vs. Microservices - Benefits and Challenges
- Introduction to TARS: Origins, Ecosystem, and Value Proposition
- Setting Up a TARS Development Environment (Linux Focus)
- TARSCLI and Basic Command-Line Operations

02 Module 2: TARS Core Concepts and Service Development

- TARS Framework Architecture: Node, Registry, Admin
- Defining Services with TARS IDL (Interface Definition Language)
- Developing TARS Services (Focus on C++ / Java / Node.js paradigms)
- Service Communication Patterns: RPC and Message Queues in TARS
- Data Persistence Strategies for TARS Microservices

03 Module 3: Deployment, Management, and Observability

- Packaging and Deploying TARS Services
- Service Lifecycle Management: Start, Stop, Update, Rollback
- Centralized Configuration Management in TARS
- Service Discovery and Load Balancing Mechanisms
- TARS Monitoring, Logging, and Alerting Tools

04 Module 4: Advanced TARS Features and Ecosystem Integration

- Implementing Circuit Breakers and Rate Limiting for Resilience

- Distributed Tracing and Transaction Management
- Integrating TARS with Containerization Technologies (Docker, Kubernetes)
- TARS Security Best Practices: Authentication, Authorization, Encryption
- Performance Tuning and Optimization for TARS Services

05 Module 5: Building Scalable and Resilient TARS Platforms

- Designing for High Availability and Fault Tolerance with TARS
- Auto-scaling Strategies for TARS Microservices
- Disaster Recovery Planning for Distributed Systems
- Best Practices for TARS Microservice Governance and API Management
- Case Studies: Real-world TARS Implementations and Architectures

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Microservices Platform Engineer**
- > **Cloud-Native Solutions Architect**
- > **Senior DevOps Engineer (TARS & Distributed Systems)**

FREQUENTLY ASKED QUESTIONS

Q: What are the essential technical prerequisites for enrolling in the 'Building Microservice Platforms With Tars Lfs153x' course?

To get the most out of this intermediate-level course, participants should have a solid understanding of software development principles, experience with at least one programming language (e.g., C++, Java, Node.js, or Go), and basic familiarity with Linux command-line operations and distributed system concepts. Prior exposure to cloud computing or containerization (Docker) is beneficial but not strictly required.

Q: How does mastering the TARS framework specifically equip me to build highly scalable and resilient enterprise-grade applications, as opposed to other microservice frameworks?

Mastering TARS provides a distinct advantage by offering a comprehensive, opinionated framework for microservice governance, which is crucial for enterprise-grade applications. Unlike some lighter frameworks, TARS includes built-in capabilities for service discovery, configuration management, logging, monitoring, and RPC, reducing the need for extensive integration of multiple third-party tools. This integrated approach, combined with its high-performance RPC and robust operational tools, enables you to build and manage highly available, fault-tolerant, and performant systems more efficiently, directly addressing the complexities of large-scale distributed environments.

Q: Will this course cover strategies for integrating TARS microservices with existing cloud infrastructure providers like Microsoft Azure or AWS, and how to manage them in hybrid environments?

Yes, while TARS is a self-contained framework, this course will cover integration strategies. Specifically, Module 4 includes topics on integrating TARS with containerization technologies like Docker and Kubernetes, which are foundational for cloud deployments on Azure, AWS, or other platforms. We will discuss best practices for deploying TARS services within cloud VMs or Kubernetes clusters, leveraging cloud-native services for networking, storage, and advanced observability where applicable. The course will equip you with the knowledge to design TARS-based solutions that can thrive in both pure cloud and hybrid environments.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

Professionals Trained

50+

Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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