

COURSE OUTLINE: Technology Infrastructure Program

Level 2 [2 Days / 16 Hours]

Data Centre implementation and architecture

- What is a physical data centre, or colocation data centre?
- Meaning of Virtual Server and Physical Server
- Virtual server, physical server, Containers, and its differences

Storage Technologies Overview

- Storage technologies overview like SAN, NAS, NVMe, Object?
- What is a Storage Device? Definition, Types, Examples
- Details about network attached storage
- What Is NVMe? - Benefits & Use Cases

Database tech overview

- Introduction to DBMS and SQL
- RDBMS Database (Oracle, MS-SQL)
- Overview of DDL, DML etc. operations
- Distributed database system (Apache Cassandra, NoSQL Mongo DB)
- Understanding in Memory DBs (Caching, Redis)

Network and Security

- Networking Basics – LAN, WAN, SD WAN
- Network security basics include but not limited to Firewalls, IPS, DDOS, WAF, and related components
- Software defined network
- What is meant by DMZ Zone?
- Web servers including WebLogic apart from Apache and NGINX

Operating System Introduction

- Overview of micro services, containerization, and distributed deployments
- Different Operating system models (Client, Server, Windows, Linux, Solaris, and AIX)
- Different tier architectures (3 tier)
- Event mesh, service mesh and its benefits

Introduction to cloud

- Cloud native architecture
- Scaling options (Horizontal, vertical)
- Control & Data plane mgmt.
- Cloud security framework
- Landing zone discussion
- Difference between IaaS, PaaS, SaaS
- Infrastructure as code
- Intro about Azure, AWS, GCP, OCI

Level 2 [16-20 Hours]

- Live walkthrough and demo of exercises for the mentioned topics