



IDCA - DATA CENTER OPERATIONS MANAGER® COURSE.



7th-11th August, 2023



8am - 4pm



Dar es Salaam, Tanzania



5066 USD Per Person, VAT Exclusive

The Data Center Operations Manager (DCOM)® course targets data center managers, data center planners, data center operations personnel, specialists, and data center strategists who are engaged with operational data centers. From the disaster recovery planning to proactive and preventive data center maintenance to health and safety criteria to capacity planning, enhancement and upgrade management, risk mitigation and migration principles to growth modeling and schemes, efficiency planning, HR roles and responsibilities, asset management, vendor, OLA and SLA management are all covered and effectively outlined in the program. The DCOM® generates distinguished data center operational managers, planners, operations personnel, service providers, and mentors and enables them to have leading roles in mission-critical data center operations.



Call Us For Registration +255 769 674 248



Email Us For Registration marketing@stcl.com



The Certification that Empowers Thousand Professionals Around the World.™



5 Days (40 Hours)



2 Courses, 2 Professional Certifications



Who should take this course?



Learning Outcomes

- Data Center Managers
- Operations and NOC Personnel
- Project Managers
- Data Center Technicians
- Data Center Planners & Strategists
- Data Center Architects
- Business Executives
- Data Center Owners & Stakeholders

- Learn advanced data center management principles.
- Learn proactive and preventive data center maintenance.
- Analyze data center policies and procedures.
- Learn effective data center operation regimes.
- Learn day-to-day data center operational management.
- Understand HR, vendor, 3rd-party, SLA & OLA management.
- Understand advanced data center efficiency concepts.
- Learn key data center optimization mechanisms.





Data Center Overview

- > Data Center History
- > Data Center Definitions
- > The Data Center Beast
- Data Center Downtime & Outage
- Present Data Center Standards
- Future of Data Center Standards

The Infinity Paradigm®

- > Application Ecosystem (AE)
- > Core & Pyramid Models
- > The Organization
- > The 7 Abstraction Layers
 - Application Layer
 - Platform Layer
 - Compute Layer
 - ITI Layer
 - SFI Layer
 - Site Layer
 - Topology Layer
- > Application Delivery Model (ADM)
- > Application Delivery Infrastructure (ADI)
- > Data Center Node (DCN)
- Logical Infrastructure
- > Physical Infrastructure

Grading Systems

- Data Center Tiers & Classes
- Data Center Grade Levels
- > AER, OER, EER, RER, SER
- Efficacy Score Rating

Data Center Development

- ➤ Data Center Tiers & Classes
- > Data Center Development Process
- > Data Center Phases

Site, Civil & Architecture

- Data Center Site Selection & Criteria
- Data Center Site Proximity, Hazard & Risks
- > Data Center Topology
- > Data Center Structure
- Data Center Construction
- Data Center Interior Fit-out
- Data Center Space Relationships
- > Data Center CR, ER, MDA, HDA and ZDA
- Data Center Raised Floor System
- > Data Center Grounding & Bounding
- Data Center Earthing

Site, Civil & Architecture

- > Data Center Site Selection & Criteria
- Logical Electrical Flow
- DC, AC, W, AV Rates and Concepts
- Utility Service
- > High Voltage Systems
- > Switchgear
- > Transformers
- > Low Voltage Systems
- Uninterruptible Power Supply (UPS)
- > Systems
- > UPS Configurations
- > Battery and Battery Types
- Generators
- > Fuel Tanks
- > Power Distribution
- > ATS, STS
- > Power Cabling
- Busbar Trunking System (BTS)
- > EPO
- > Grounding
- > Lightning Protection System
- > Alternative Power Sources
- > EF, MF, EMF, EMI
- > EMF & EMP Shielding

— What do industries leading experts think? —

We are very happy to get client's review!



T-Mobile

Senior Facilities Engineer

"I thought the course was very comprehensive and went into the appropriate amount of detail that goes into data center engineering."



Intel

Data Center Manager

"For those who this may concern, I would say all in all, it's an A+"





Data Center Cooling

- > Environmental Air
- Cooling Capacity
- Precision Cooling
- Direct Expansion (DX) Systems
- Non-DX Systems
- Cooling Methodologies
- ➤ Cold-Aisle / Hot- Aisle
- > CRAC/CRAH
- Cooling Topologies:
- Open CRAC Systems
- > Aisle Containment (Cold & Hot)
- > In-Row Cooling
- > In-Rack Cooling
- Cooling Towers
- Chillers
- Data Center Water Supply

Fire Protection

- Fire Types and Classes
- > Smoke and Heat Detection
- Aspiratory Detection and Sensing
- > Sprinkler Systems
- > Gas Suppression Systems & Agents
- (FM200, Novec, etc.)
- > Fire Prevention Technology
- Data Center Safety

Data Center Security

- Physical Infrastructure Security
- > CCTV
- Access Control
- Mantraps
- Barbwires
- > Security Protocols & Procedures
- > IT Infrastructure Security

Data Center Structured Cabling

- ➤ Cabling Layout
- Patching & Termination
- Labeling
- > Intelligence

IT Infrastructure

- > System
- Storage
- Networks
- > Virtualization & Cloud
- External Telecom Connectivity
- High Availability Designs

Data Center Efficiency

- > cost of Energy
- Power Usage
- Power Usage Effectiveness (PUE)
- Data Center Infrastructure Efficiency (DCIE)

- > Applications and Hosting Models
- Applications
- > Application Delivery Architecture
- > App Tiers
- Colo vs Managed Hosting
- > ASP Hosting
- ➤ Public & Private Clouds

Monitoring and Management

- > MMS, EMS, EPMS, BMS
- > Temperature Monitoring
- > Leak Detection
- > Integration

Network Operation Center (NOC)

- Systems
- > Procedures
- Control

Data Center Trends

- > Latest Data Center Technology Trends
- Latest Data Center Industry Trends

— What do industries leading experts think? —

Outstanding experience

"I think the course was good overall, and I expect to be able to take a lot back to my company."







Compliance

- > Data Center Assessment
- > Data Center Audit
- > Data Center Certification
- > Data Center Certification Types
- > Data Center Standards, Frameworks, BPs

Quality Systems

- Quality Assurance
- ➤ Quality Control
- > Quality Improvement

Business Continuity

- > Data Center Risk Factors
- Business Continuity Management
- > Business Continuity Planning
- > RPO
- > RTO
- Disaster Recovery Planning

Data Center Organizational Structuret

- > Data Center Stakeholders
- > Open Process Framework
- > Data Center Operations Management Team
 - Data Center Business Manager
 - Data Center Topology Manager
 - Data Center Operations Manager
 - Data Center Node Operations Manager
 - Data Center Node Manager
 - Data Center SFI Manager
 - Data Center ITI Manager
 - Data Center Floor Manager
 - Data Center Site Manager
 - Data Center NOC Manager
 - Data Center S&S Manager
- Relationships, Duties and Limitations

Human Resources

- Principals of Data Center HR
- > People as Assets
- > People as People
- > Job Description
- > Recruitment
- > Benefits & Compensation
- > Orientation & Training
- > Performance & Evaluation
- > Retention Plan
- > Dismissal
- > Job Rotation
- > Skills Redundancy Plan
- Data Center HR Challenges

— What do industries leading experts think? —

Excellent experience

"The course was just excellent"





Data Center Operations Manager (DCOM)®

Data Center Management

- Cost Management
- > Asset Management
- Equipment Lifecycle Management
- > Buy or Lease Evaluations
- Warranties
- > Vendor Management
- > RAS, RFP, RFI, RFT, RFQ, IFB
- > Crises Management

Data Center Service Availability

- > SLAs
- > SLRs
- > OLAs > OLRs

Data Center Efficiency

- Green Initiatives
- ➤ KPI's
- OPEX Monitoring
- DCIE, SEER, EER, COP, SPF

- ➤ EUE and PUE v2
- > PUE Loopholes
- > Advanced PUE Concepts
- > Enhanced Cooling Efficiency
- > Increased Power Efficiency
- > Applied Virtualization
- > Utility Computing

Data Center Day-to-Day Operation

- ➤ Data Center Policies & Procedures
- Data Center SOPs
- > Data Center Checklists
- Data Center WOs
- ➤ Data Center SOWs
- Data Center PTWs
- Data Center Floor Management
- Data Center Inventory Management
- Commissioning & Decommissioning
- ▶ Labeling Matrix & Methods

- > Business Office Management
- Documentation Management
- Data Center Micro Cleaning
- > Data Center Pest Control
- > Facilities Management
- Computational Fluid Dynamics
- Real-Time Monitoring
- > Thermal Imaging
- Cooling System Maintenance Regime
- > Fire Protection Systems Management
- > Electrical Systems Maintenance Regim
- Licerrical ogorerno Mannenance
- Generator Testing
- > UPS Management & Testing
- > ITI Operations Management
- > ITSM, ITIL v.3
- > Loading Dock
- > Shipping & Receiving Area
- Staging Area
- > VTS and Burn-In





Data Center Capacity Management

- Capacity Management Concepts
- Cost-Value-Efficiency Analysis
- > ABC
- Capacity Management Activities
- Capacity Management Process
- > ETL
- > Facility Capacities & Load
- > Structural Capacities & Load
- > Telecom Capacities & Load
- > IT Capacities & Load
- Capacity Benchmarking
- > Capacity Trending
- > Capacity Modeling
- Capacity Analytics
- Capacity Planning Tools

Data Center Monitoring & Management

- > M&M Goals
- ➤ Monitoring & Management Systems
- Environment Monitoring System (EMS)
- Electrical Power Management System (EPMS)
- Building Management System (BMS)
- Network Management System (NMS)
- Data Center Infrastructure
- Management (DCIM)
- Business Service Management (BSM)
- M&M Reporting & Analytics
- Support & Help Desk

Data Center Safety & Security Management

- > Safety Priorities & Plans
- ➤ Emergency Types & Plans
- > Security Controls & Management
- Visitor Types and Access
- > Penetration Testing and Techniques



DCOM'

Data Center Maintenance & Repair

Data Center Maintenance Regimes

Data Center Maintenance Grades

Maintenance Scope, Budget

Skillsets, and Impact

Maintenance Contracts

▶ MTBF and TTR













— What do industries leading experts think? —

Excellent experience

"Course was great, very informative, a few of my guys will be coming back for training next year."

