



Certified Data Centre Facilities Operations Manager (CDFOM)

This course is designed to expose participants to in-depth knowledge about managing data centre operation which includes the following key subject matters such as; capacity planning, latest green initiatives, how to properly commission and de-commission equipment, compliance to safety standards, statutory compliance and international standards, managing people.

Additionally vendor management, handling incident/crisis management as well the how to keep operations really simple, manageable, effective and efficient will receive full attention in this course.

Audience

The primary audience for this course is an IT, Facilities or Data Centre Operations professional working in and around the data centre (representing both end-customers and/or service provider/facilitators) and having responsibility to achieve and improve hi-availability and manageability of the Data Centre, such as: Data centre managers, Operations/Floor/Facility managers, data centre engineers, network/system engineers/data centre sales/consultants.

Pre-Requisites

It is advisable for the participants to have some experience in data centre operations although it is not required. It is highly recommended to attend the CDCPÂ® course before attending the CDFOMÂ® course.

Topics Covered

The Data Centre Operations Team

Leadership criteria and attributes

- How to set-up up an efficient and effective facility management operations team structure
- Defining roles, responsibilities and skill metrics
- Key Performance Objectives (KPO) and appraisals
- Job rotation, reward, promotion and succession planning as strategies to grow and retain talent
- Training and assessments
- Shift management, scheduling and roster planning

Vendor Management

- Vendor selection and qualification
- Managing risk and dealing with non-compliance, public liability, legal, escalation and complaint procedures
- Key considerations of a vendor agreement for services
- Performance measurement and reporting

Facilities Maintenance

- Maintenance options
- Main considerations for maintenance agreements
- The practicality in deciding between comprehensive/non-comprehensive maintenance regimes
- Warranty pit falls
- Service reports alignments with maintenance agreements
- Tiered maintenance considerations
- Preventive, Predictive, Condition and Reliability Centred (RCM) based maintenance
- Managing on-site/on-sites spares and how to determine which spares to keep on-site

Managing Safety & Statutory Requirements

- Statutory and industry compliance/regulations
- Emergency response and safety policies and procedures
- PTW (Permit To Work) requirements and procedures
- General rules and regulations for the data centre
- Ergonomic workspace
- SOPs for power outage, fire, bomb threat etc.

Service Level Agreement (SLA) Management

- Defining the data centre design limitations
- Defining measurement criteria and reporting
- Alignment of business SLA with vendor SLA
- Defining change management procedure for installation and de-installation of new equipment
- Reporting and escalation management

Managing Physical Security

- Guidelines from standards; ANSI/TIA-942, ISO/IEC- 27001/02, SS507
- SOP (Standard Operating Procedures) in managing day to day security access control, such as;
 - Entry/exit control and access management
 - Permit-To-Work (PTW) and contractor work in progress
 - Delivery of goods
 - Customer access
 - Etc.
- Effective patrols routing and how to ensure 24x7 vigilance
- Handling external threats; crisis/emergency situations
- Security incident management

Managing Daily Data Centre Operations/Floor Management

- ITSM/ITIL (IT service management) in the data centre
- Shift hand-over requirements and procedures

- Asset and inventory management for hardware, software, spares, consumables, etc.
- Floor management procedures and duties such as rack space allocations, management of installers
- Pre-installation analysis for power, cooling, weight, EMF, fire protection and other influencing factors
- From truck to rack
- Handling of incoming equipment
- Inspection, unpacking and security procedures
- Staging procedure and requirements
- Equipment movement into the computer room
- Finishing up the installation
- De-installation/commissioning procedures

Capacity Management

- Defining the design limits of the data centre
- Setting up thresholds, monitoring and reporting
- Business review and future capacity planning
- Technical solutions aiding capacity planning such as Computational Fluid Dynamics (CFD), capacity and configuration management solutions

Cable Management

- Overview of ANSI/TIA-942, ANSI/TIA-606 requirements
- Cabling specification & labelling based on ANSI/TIA-606
- In-rack power and network cabling
- Labelling requirements
- Cabling/cable tray layout documentation

Data Centre Cleaning and Pest Control

- Types of pollution found in data centres such as H₂S, air-particulates etc.
- Common causes of pollution in the data centre
- Standards, policies and techniques to reduce and cleanup dust, pests and other pollution and disturbances

Data Centre Monitoring and Automation

- Data centre monitoring requirements
- Threshold setting and reporting requirements
- Notification and escalation requirements
- Automated 24hrs helpdesk ticketing systems
- Incident and customer complaint management & change management
- Performance measurement and monitoring requirements such as fuel and water consumption, PUE/DCiE etc.

Managing Documentations/Archives

- Document management standards
- Document management process requirements
- Minimum and desired design documentation set
- Operational management documents

Equipment Life-Cycle Management

- Policies and procedures governing life cycle management
- Asset management including software and firmware
- Service situations
- Review, triggers and reporting
- Test life cycle