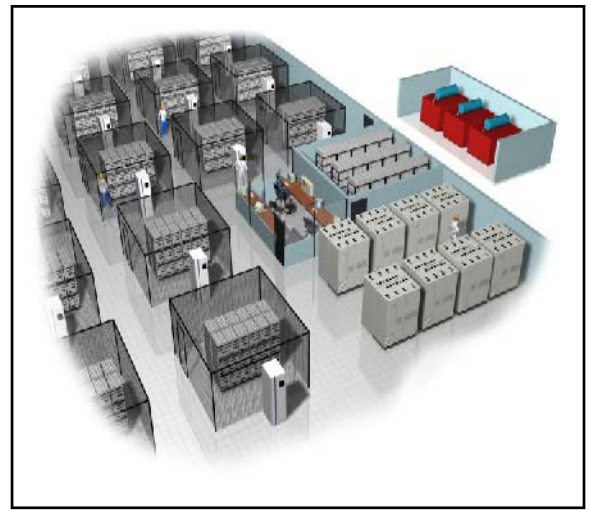


CDFOM[®] Certified Data Center Facilities Operations Manager



Introduction

Managing the facilities of today's hi-end and hi-availability data centers is an extremely demanding and complex task which is often underestimated. There is often very little appreciation and understanding of the complexities of managing today's mission critical data centers especially since many of the data centers are operating at, or near, their design limits and downtime is never an option.

The way a data center is managed at the facilities layer makes all the difference and even a data center designed to Tier-4 as per the ANSI/TIA-942 standard could still experience many unscheduled down time events due to poor planning, operations, maintenance and management processes.

CDFOM

The CDFOM course is a 3 days course after which participants will have gained in-depth knowledge in managing data center 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, Vendor Management, handling Incident/Crisis Management as well the how to keep operations really simple, manageable, effective and efficient and much more.

Audience

The primary audience for this course is an IT, Facilities or Data Center Operations professional working in and around the data center and having responsibility to achieve and improve hi-availability and manageability of the data center.

Prerequisites

It would be advisable for the participants to have some experience in data center operations although it is not required.

Delivery Structure

This is an instructor-led course that uses a combination of presentation lectures and question and answer sessions to discuss attendees specific needs and issues experienced in their own environment. Attendees are able to tap on the trainer's extensive experience to solve practical problems in their current environment adding tremendous value.

The Trainer

This course will be delivered by a data center operations veteran with many years of experience in managing mission critical data centers.

Would you like to join the elite group of Certified Data Center Professionals?

World-Wide accredited by:



Benefits realized

After completion of the course the you will be able to Understand:

- How to setup a data center facilities operations team
- How to manage and motivate your Facilities Management team
- How to setup SLA's and manage them including liabilities, KPI's etc.
- How to manage vendors and measure their performance
- How to manage physical security taking into account requirements of standards such as TIA-942 etc.
- How to manage safety & statutory requirements
- How to effectively and efficiently manage data center operations
- How to manage documents
- How to go about equipment life cycle including testing
- How to define data center design limits and setup and manage a proper capacity management plan
- How to commission and de-commission equipment
- How to go about IT Cable management
- Managing day-to-day data center operations
- And much, much more...

Course Syllabus

Day 1

The Science / Art of Managing People (Data Center Ops Team)

- How to set-up up an Efficient & Effective Facility Management Operations Team
- The importance and advantages in defining Roles & Responsibilities utilizing multi-tasking to maximize output
- Criteria and attributes of Leadership & how can mentoring, motivation and empathy help you to manage a complex and competitive Data Centre environment
- Using Reward and Promote as internally strategies to grow and retain talent

Key Attributes in SLA Management

- Main deciding clauses in a contractual agreement such as; insurance, public liability, SLA, KPI, etc.
- Defining the main characteristics and practicality of Escalation procedures, Crisis/Emergency Management etc.
- How to leverage vendors participation in monthly FM reporting to ensure collaboration to achieve full SLA compliance

Key Attributes In Vendor Management

- Key considerations of a typical Master Agreement
- Managing risk and dealing with Non-Compliance, Public Liability, Legal and other potential issues
- The practicality in deciding between Comprehensive/Non-Comprehensive maintenance regime
- The practical ways to manage On-site /Off-sites Spares
- Defining what is required in SLA, KPI, Response time, Fix time

Global Trends / Rule of Thumb in Data Centre Infrastructure

- Infrastructure design- example modular approach, PUE calculation, Green initiatives, etc.
- Top 10 flaws in designs with case studies for knowledge sharing
- Hands-on practical lesson on Electrical Loading e.g. from upstream breaker down to UPS, PDU level and how to maintain a balance load between RYB phases including discrimination breaker setting to avoid nuisance tripping

Day 2

Hands-On Approach In Managing Physical Security

- Guide lines out of Standards; ANSI/TIA-942, ISO/IEC-27001/02, SS507, ISO/IEC-24762 etc.
- Handling Terrorist, Bomb Hoax, Crisis/Emergency situation
- Effective patrols routing and how to ensure 24hrs vigilance without slippage
- SOP in managing day to day security access, such as; permit to work, delivery, contractor work in progress, customers access etc.

Hands-On Approach In Managing DC Operations

- Easy and simple ways to implement "Permit to work"
- SOP of managing A&A /Fit-out work-in-progress
- Importance of Asset management & Inventory management
- Cause and Effect of keeping a CLEAN / Dust Free Data Center
- Daily system logging and interpreting signs of equipment failures to prevent sudden outages etc;
- BMS Firmware updates

Knowing How to Right Size During Capacity Planning

- Defining the design limits of the data center
- Setting up thresholds, monitoring and reporting
- Managing high density racks like blade servers

The Know-How In Commissioning and de-commissioning of equipment

- Handling of incoming equipment
- Inspection and unpacking procedures
- Staging procedure
- Equipment movement into the DC/MMR/MDF room
- De-installation/commissioning procedures

Basic Overview of IT Cabling Management

- Overview of ANSI/TIA-942, ANSI/TIA-606,
- Cabling Specification & Labeling based on TIA-606
- In rack power and network cabling
- Cable layout documentation

Hands-On Approach In Managing DC Operations

- System daily data logging example- UPS & Batteries, Chiller, Cooling Tower, Water Pumps, etc
- Standard Operation Procedures – How to ensure FM staffs are trained to execute SOP during crisis/outages.
- Using the above to spot & prevent instant failures and carried out planned parts/equipment repair & replacement.

Day 3

Awareness In Managing Safety & Statutory Requirement

- Up keep and maintain an up to date Fire Emergency Plan, Fire Safety
- Compliance to Statutory requirement – Portable tank sterilization , chemical treatment for Cooling tower, etc.

Managing Automated Service Management As Competitive Tools

- Various types of Automated 24hrs Helpdesk ticketing system and it advantages
- How to manage Incident, customers complaint management & change management using the above system
- Creating a unique customer interface procedure for ease of communication with clients' representatives.

The Importance Of Managing Documentations/Archives

- Updating drawings- As-builds, SLD, etc
- Archiving incidents report, alarm print-out, BMS trending, system logging, SLA, KPI records etc

Understanding the Usefulness Of Equipment Life-Cycle Management

- Policies and Procedures governing life cycle management
- Service situations
- Review, triggers and reporting
- Test life cycle

Best Practices for M&E Maintenance Regime

- Setting up & customize a 12months look-ahead maintenance regime that best suits your business needs.
- The importance of Predictive Maintenance eg; Thermo-scan, pumps vibration and alignment test, BMS failure and system back-up testing, Genset load testing etc. These will prevent instant failure and avoid prolong downtime and affect business continuity.
- The Do & Don't of Annual testing for main equipment like Transformer, Genset, HT gear, Chiller, Pumps, Cooling Tower etc;

■ EXAM: Certified Data Center Facilities Operations Manager

Certification & Accreditation

Certification exams will be administered at the end of the last day of the course. The exam is a one and half hour, 60 questions, closed book exam. Results of the exam pass/fail will be communicated to the attendee within four weeks after the examination. Attendees who pass the exam will receive the official "Certified Data Center Facilities Operations Manager Certificate.

This world-wide recognized certificate is accredited by 'ICOR'.



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