



HP Education Services Course Description

Certified Data Center Facilities Operations Manager (CDFOM®) Training (HK763S)

This 3-day course will enable participants to gain in-depth knowledge of managing data center operations from planning to monitoring and reporting. This course breaks down the complexity of managing a mission-critical high-availability data center facility into manageable and systematic processes. The CDFOM® is an intensive course packed with a lot of information which brings tremendous value to the participants, enabling them to improve the operations of their data center.

Audience

- The primary audience for this course is an IT, Facilities or Data Center Operations professional working in and around the data center (representing both end-customers and or service provider / facilitators) and having responsibility to achieve and improve hi-availability and manageability of the Data Center.

Prerequisites

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

Delivery structure

- The courses are lectured by certified trainers. CDFOM® is an instructor-led course that uses a combination of lectures and question-and-answer sessions to discuss participants' specific needs and issues experienced in their own environment. Participants are able to tap into the trainer's extensive experience to enable them to solve practical problems in their current environment, thus adding tremendous value.

Course objectives

After completion of the course the attendee will be able to:

- Setup a data center facilities operations team.
- Manage and motivate your facilities management team.
- Setup SLA's and manage them including liabilities, KPI's etc.
- Manage vendors and measure their performance.

| | |
|------------------------------|--|
| Course title: | Certified Data Center Facilities Operations Manager (CDFOM®) Training |
| HP product number: | HK763S |
| Category/Subcategory: | Data Center / Operations & Governance |
| Course length: | 3 days |
| Level: | Advanced |
| Delivery language: | English |
| To order: | In HK, please contact HP Education Services on (852) 3070-6692 or email at hp-education.hk@hp.com or visit www.hp.com.hk/education Other countries please visit www.education.hp.com |

- Manage physical security taking into account requirements of standards such as ANSI/TIA-942 etc.
- Manage safety & statutory requirements.
- Effectively and efficiently manage data center operations.
- Manage documents.
- Set-up equipment life cycle including testing.
- Define data center design limits and set up and manage a proper capacity management plan.

- Commission and de-commission equipment.
- IT cable management.
- Manage the day-to-day data center operations.

Examination accredited by EXIN

- Attendees will take a one and a half hour, 60 questions, closed book and multiple choice based exam. The candidate requires a minimum of 45 correct answers to pass the exam. Attendees passing the exam will be awarded the internationally accredited and recognized 'Certified Data Center Facilities Operations Manager' certificate (CDFOM). The certification is valid for three years after which the student needs to re-certify.

Benefits to you

- Understand more about all aspects of data center facilities operations management.
- Receive training and advice from one of the industry's leading experts.
- Obtain the CDFOM® certificate.

Why education services from HP?

- Recognized as an IDC MarketScape leader for IT education ("Worldwide IT education and training 2013 vendor analysis" Cushing Anderson, IDC MarketScape, #239139, January 2013).
- Global training with more than 90 training locations worldwide.
- Unmatched technical expertise and support for HP products and technologies.
- HP MyRoom for real-time collaboration and Virtual Labs for a real hands-on experience.
- The training you need, when and where you need it with our Virtual Instructor-Led Training (VILT).
- Comprehensive curriculum of job-specific training leading to certification.
- Streamlined purchase and management of training with HP Care Pack Services for Education.
- Our HP Education Consulting team has delivered best-in-class tailored training solutions to clients for more than 30 years.
- One of the top 20 training and content development providers (TrainingIndustry.com - 2013).

Next steps

- CDCP® Certified Data Center Professional course (HK258S) builds upon knowledge gained in CDFOM® which exposes participants to the key components of the data center.

Detailed course outline

The Data Center 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 Centered (RCM) based maintenance
- Managing on-site /off -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 Center
- Ergonomic workspace
- SOP's for power outage, fire, bomb threat etc.

Service Level Agreement (SLA) Management

- Defining the Data Center 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, ISO/IEC-24762
- 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
- Effective patrols routing and how to ensure 24x7 vigilance
- Handling external threats; crisis / emergency situations
- Security incident management

Managing Daily Data Center Operations / Floor Management

- ITSM/ITIL (IT service management) in the Data Center
- 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 Center
- 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 Center Cleaning and Pest Control

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

Data Center 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

Mock exam

EXAM: Certified Data Centre Facilities Operations Manager

For more information

To locate country contact information and to learn more about education services, please visit our worldwide web site at <http://www.hp.com/learn>.

