

## **Symantec Data Centre Professional (CDCP™)** **(Certified by EPI under worldwide accreditation by ICOR)**

### **INTRODUCTION**

With few exceptions, enterprises today rely on IT for the delivery of business-critical services - often directly to the end consumer. It is therefore vital that the mission critical data centre is designed, maintained and operated with high availability and efficiency in mind. Fact is however that most data centre's do not meet the full availability, capacity, safety or efficiency requirements often demanded. The ever changing technologies put even more pressure on data centre managers along with the ever faster pace at which these changes are required. On top of that, there are a vast number of companies where the data centre is a shared responsibility between the IT and Facilities divisions, each having their own values and standards to which they believe a mission critical site should be designed, maintained and operated.

This course will provide anybody involved with data centre design, maintenance and operations, valuable lessons which will enable a hi-available, flexible, safe and efficient mission critical data centre environment for both new and existing sites.

### **Delivery Method**

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.

### **Duration**

Two days

### **Who Should Attend**

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

### **Prerequisites**

While there are no specific prerequisites for the CDCP™ course, participants who have at least one / two year(s) of actual working experience in a data centre / facilities environment are best suited.

### **COURSE OUTLINE**

#### **Day 1**

**Learning Objectives** -- Participants will be able to understand:

- The Data Centre, its Importance and causes for downtime
- Data Centre Standards and best practices
- Building construction
  - Various components of an effective data centre and supporting facilities
  - Selecting appropriate sites and how avoid pitfalls
- Raised Floor/Suspended Ceiling
  - Standards
  - Uniform versus point loading and calculations
- Power infrastructure
  - Power infrastructure layout from generation to rack level
  - Redundancy levels and techniques
  - Bonding versus Grounding
  - Power distribution within the data centre
  - Distribution boards
  - Form factors and IP-Protection grades
  - Real Power versus apparent power, how to calculate load in Data centre
  - Nine common power disturbances and the cause
  - UPS technologies and making right choice for the data centre and other applications
  - Various Battery technologies available and monitoring systems
  - Thermo-graphics
- Electro Magnetic Fields
  - Sources of EMF
  - Effects of EMF on equipment

- Effects of EMF of human health and safety
- Tempest
- (H)EMP
- Standards
- Solutions for protection against EMF / TEMPEST / EMP

## Day 2

**Learning Objectives** - Participants will be able to understand:

- Cooling infrastructure
  - Cooling requirements now and future
  - Techniques to increase effectiveness and efficiency of cooling in existing data centre
  - Techniques and technologies to cool future data centre's
- Light
  - Standards
- Designing a Scalable Network Infrastructure
  - Cabling Hierarchy
  - Cable Characteristics
  - Storage Area Networks (SANs)
  - Determining Connectivity Requirements
  - Network Redundancy
  - Networking Room
  - Common Termination Options
  - Building-to-Building Connectivity
  - Recommended Installation Practices
  - Testing and Verifying Structured Cabling
- Fire suppression
  - Standards for Fire Suppression
  - Various fire suppression techniques and systems, their benefits and disadvantages
  - How to ensure that your fire suppression is working
- Data Centre monitoring
  - Monitoring requirements
  - Remote monitoring and control of the data centre
- Operational Security and Safety Practices
  - Various Security systems
  - Security policies and practices
  - Safety measures
  - Essential Signage
- Labeling
  - Choosing a Numbering Scheme
  - Recommended Labeling Practices
- Documentation
  - How to setup proper documentation
  - How to maintain
- Cleaning
  - Cleaning practices for the data centre
- MTBF/MTTR
  - Standards and definitions
  - Calculation models
  - The "real" value
- **Maintenance Contracts / OLA**
- **IT service management based on ITIL /BS15000/ISO-20000**
  - History of IT-Service Management
  - Standards and best practices
  - An overview on ITIL® /BS15000/ISO-20000
  - How to achieve certification
- **EXAM: Certified Data Centre Professional**

World-Wide accredited by:

