



CONTINUITY & RESILIENCE

Syllabus of the IT Disaster Recovery Workshop

leading to the

ITDR Specialist Certification

Version 1.0 – December 2012

Note – this document has been prepared by
Continuity and Resilience

Course description:

The 3-day IT DR Workshop covers all stages of the entire IT Disaster Recovery lifecycle. This workshop will be very useful for IT professionals and CM/DR practitioners. Training methodologies include classroom training, individual/group exercises, case studies and role-plays, while videos and group discussions, knowledge checks and quizzes are made use of in order to enhance the participant learning experience and exam preparation.

Learning Objectives:

- Establish DR Policy and Programme Management
- Perform BIA and RA to understand the organization's IT DR needs
- Determine IT DR Strategies to support critical business functions, IT components and related infrastructure
- Assimilate various IT DR options and multi-tiered DR concepts
- Design appropriate IT DR Design using contemporary technologies
- Develop and implement comprehensive IT DR plans and setup
- Conduct IT DR Tests and Exercises, IT DR Maintenance, Review and Audit
- Embed IT DR in the Organization's Culture
- Understand business imperatives of IT DR
- Appreciate support processes like BCM, IM/CM/EM etc.

Who should attend:

- Full-time or part-time IT/BCM/Operations and other IT Professionals interested in learning more about Global IT DR Best Practices
- Auditors wanting to gain an in-depth understanding of IT DR
- Professionals from IT DR or BCM-related domains such as Crisis and Risk
- Data Center Managers with DR responsibilities

Overview of the Workshop Agenda

1. Key Concepts
 - a. High Availability (HA)
 - i. Availability
 - ii. Reliability
 - iii. Serviceability
 - b. Disaster Recovery (DR)
 - i. Recovery Time Objective (RTO)
 - ii. Recovery Point Objective (RPO)
 - c. Business Continuity (BC)
 - d. IT Disaster Recovery
2. HA & DR - Architecture-Aspects
 - a. Data
 - b. Function
 - c. Location
 - d. People
 - e. Time
3. HA & DR - Architecture-Abstraction Levels



- a. Objectives
- b. Conceptual Model
- c. System Model
- 4. HA & DR System Design
 - a. Base Concepts
 - i. System Stack
 - ii. Redundancy
 - iii. Robustness
 - iv. Virtualization
 - b. Solution Roadmap
 - i. Control Objectives
 - ii. Assessment Metrics
 - iii. Preventive & Mitigation Measures
 - iv. List failure scenarios
 - v. Evaluate scenarios, and determine their probability
 - vi. Map scenarios to requirements
 - vii. Design solution, using the dependency chart methodology
 - viii. Review the solution, and check its behavior against failure scenarios
 - c. System (solution) Patterns
- 5. HA & DR Components
 - a. Level of Service (hot/warm/cold)
 - b. DR Models (2, 3, 4 way DR)
 - c. Data Replication
 - d. Systems Set up (servers/os/apps/storage)
 - e. Connectivity (LAN/WAN/Network Devices)
 - f. IT DR & ITIL
 - g. SLAs
 - h. Work Area Recovery (WAR)
- 6. HA & DR Options
 - a. Mirroring/RAID
 - b. Snapshots
 - c. Tape Vaulting
 - d. Journaling
 - e. Clusters
 - f. Virtualization
 - g. Clouds
 - h. Captive DR Site
 - i. Managed DR Services
 - j. Dependencies
 - k. DR Automation
 - l. Vendor Selection
 - m. DR Set up
- 7. Backup Procedures/DR Resources
 - a. Data
 - b. Applications
 - c. OS
 - d. Storage
 - e. People
 - f. Work Area
 - g. Offsite Storage



- h. Media Testing & Recycling
- 8. HA & DR Testing & Exercising
 - a. Walk Through
 - b. Simulation
 - c. Parallel
 - d. Full Interruption
 - e. Test Planning
 - f. Test execution
 - g. Test Reporting
 - h. Failover Procedures
- 9. DR Plan Review & Maintenance
- 10. Failback to Primary Site
- 11. HA & DR Vs Business Imperatives
 - a. Critical Success factors
 - b. Why HA & DR
 - c. HA/DR Vs Business
 - d. Business Impact Analysis
 - e. Risk Assessment
 - f. Recovery Strategies
 - g. DR Methodology
 - h. Non-IT Components
 - i. DR Plan Development/DR Team
 - j. Management Buy-in
 - k. DR Programme Management
 - l. DR Awareness & Training
- 12. Support Processes & Teams
 - a. Incident Management Plan/Team
 - b. Emergency Management Procedures/Team
 - c. Crisis Communication Plan/Team
 - d. Damage Assessment & Restoration Plan/Team
 - e. Business Continuity Plan/Team
 - f. Change Management/Team
- 13. Mandated DR requirements/Statutory & Govt. Legislation on IT DR

Note:

- 1. The above syllabus is indicative, and the exact coverage during the workshop may be different as required.
- 2. The ITDR Exam is currently administered in paper-based mode at the end of the workshop. An electronic exam will be introduced in due course

