# WUVN

### **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

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## VERITAS Veritas InfoScale Availability 7.3 for UNIX/Linux: Advanced Administration I

CODE: LENGTH: PRICE:

VER\_ISA-7.3 AA I 40 Hours (5 days) £2,800.00

#### Description

The Veritas InfoScale Availability 7.3 for UNIX/Linux: Advanced Administration I course is designed for the IT professional tasked with managing, configuring, and using clusters in an enterprise environment.

This class covers how to set up advanced networking and fencing configurations, as well as disaster recovery solutions.

Note: This course does not teach basic clustering concepts and is a follow-on course from the Veritas InfoScale Availability 7.3 for UNIX/Linux: Administration course.

#### Objectives

By the completion of this course, you will be able to:

Configure advanced networking environments. Implement advanced fencing configurations. Configuring and manage disaster recovery environments and campus clusters.

#### Audience

This course is for system administrators, architects, and technical support personnel who are responsible for implementing, managing, and supporting clusters in complex enterprise environments.

#### Prerequisites

You must have administrator-level experience with UNIX or Linux, TCP/IP networking, and clustering using Veritas Cluster Server.

#### Programme

| Reviewing an Existing VCS Environment<br>Understanding the VCS architecture       |   |                                       |
|---|---|---------------------------------------|
| Building the cluster configuration  |   |                                       |
| Advanced Networking Configuring VCS   |   |                                       |
| Labs  |   | Configuring LLT                       |
| Exercise A: Adding hosts to VIOM  |   | LLT over bonded interfaces            |
| Exercise B: Using SORT  |   | LLT over UDP                          |
| Exercise C: Verifying the installed clustering software                           |   | LLT over RDMA                         |
| Exercise D: Understanding cluster memberships and communication                   |   | LLT with different network interfaces |
| Exercise E: Getting familiar with the cluster configuration                       |   | Manually configuring LLT              |
| -   | Using Multiple Public                       | c Network Interfaces                  |
| Labs  | Configuring multiple                        | service groups with network resources |
| Exercise A: Configuring LLT over UDP  | Managing multiple public network interfaces |                                       |
| ercise B: Restoring the original configuration MultiNICB and IPMultiNICB for UNIX |   |                                       |
|   |   | IltiNIC for Linux                     |
|   |   |                                       |

| Labs   | Implementing Disk-Based I/O Fencing  |  |
|--|--|--|
| Exercise A: Using multiple network interfaces for increa   |  |  |
| Exercise B: Observing NIC failover   | I/O fencing concepts   |  |
| Exercise C: Configuring a parallel network service grou  |  |  |
| Exercise D: Replacing NIC resources with Proxy resour  |  |  |
| Exercise E: Restoring the original configuration   | Data Protection Fencing configuration                                      |  |
| Labs   | Implementing Coordination Point Server                                     |  |
| Exercise A: Verifying I/O fencing configuration  | Coordination point concepts  |  |
| Exercise B: Verifying data disks for I/O fencing   | Server-based fencing architecture  |  |
| Exercise C: Testing protection from data corruption  | CPS operations   |  |
| Exercise D: Observing response to system fault<br>Exercise E: Observing response to interconnect failure | Installing and configuring a CP server<br>Configuring I/O fencing with CPS |  |
|  |  |  |
| Exercise F: Configuring SCSI3 disk-based fencing in a Labs   | VCS cluster Coordination point agent                                       |  |
| Exercise A: Installing a single-node VCS cluster   |  |  |
| Exercise B: Configuring a single-node CP server  |  |  |
| Exercise C: Verifying the CP server configuration  | Administering Fencing Configurations                                       |  |
| Exercise D: Configuring for I/O fencing with a CP server   |  |  |
| Exercise E: Testing CP server communication failure  | Administering CPS  |  |
| Exercise F: Testing CP server caching  | Administering disk-based I/O fencing                                       |  |
| Exercise G: Restoring the original configuration   | Configuring preferred fencing  |  |
| Labs   | Conliguing preferred lending   |  |
| Exercise A: Configuring CP server on a VCS cluster   |  |  |
| Exercise B: Verifying the clustered CP server configurat   | ion .  |  |
| Exercise C: Modifying the fencing configuration on the a   |  |  |
| Exercise D: Testing CP server failover and communication   |  |  |
|  |  |  |
| Exercise E: Restoring the original configuration<br>Global Clustering Architecture and Concepts          | Disaster Recovery  |  |
| Global cluster architecture  |  |  |
| Global cluster components Labs   |  |  |
|  | A: Preparing the lab environment for global clustering                     |  |
|  | B: Configuring a local service group for the application                   |  |
| Labs   | b. Configuring a local service group for the application                   |  |
|  | onfiguring the global cluster option                                       |  |
|  | ecuring communication between the wide-area connectors                     |  |
|  | inking clusters  |  |
|  | erifying DNS server access from cluster systems                            |  |
|  | onfiguring a global service group  |  |
| Managing a Global Cluster Labs   |  |  |
|  | ercise A: Testing dynamic DNS updates                                      |  |
|  | ercise B: Adding another Icmp heartbeat link                               |  |
|  | ification and Failover Behavior in a Global Cluster                        |  |
| Notification in a global cluster   |  |  |
| Failover behavior of a global service group  |  |  |
| Cluster state transitions  |  |  |
| Simulating global clusters using the VCS Simulator   |  |  |
| Labs   |  |  |
| Exercise A: Configuring notification and event triggers  |  |  |
| Exercise B: Testing local failover   |  |  |
| Exercise C: Testing intercluster failover with ClusterFail   | OverPolicy set to Manual   |  |
| Exercise D: Testing intercluster failover with ClusterFail   |  |  |
| Exercise E: Testing intercluster failover with ClusterFail   |  |  |
| Exercise F: Restoring the original configuration   | ,  |  |
| Administering Campus Clusters  |  |  |
| Campus clustering solutions with InfoScale   |  |  |
| Preparing to set up a campus cluster configuration   |  |  |
| Configuring Storage Foundation for campus clustering   | Labs   |  |
| Configuring a VCS service group for campus clusters  | Exercise A: Reviewing the lab environment                                  |  |
| Testing site awareness   | Exercise B: Configuring site awareness at the Storage Foundation level     |  |
| Failure scenarios with campus clusters   | Exercise C: Configuring the campus cluster                                 |  |
| Optional: Legacy campus clustering   | Exercise D: Testing service group failover in a campus cluster             |  |
|  |  |  |

#### **Session Dates**

On request. Please Contact Us

#### **Additional Information**

This training is also available as onsite training. Please contact us to find out more.