

# **VSPHERE: TROUBLESHOOTING WORKSHOP (V6.7)**

## **CODE STAGE : VM001**

### **OBJECTIFS**

This hands-on training workshop provides you with the advanced knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere® 6 environment. This workshop increases your skill and competence in using the command-line interface.

### **DURÉE**

5 jours

### **PUBLIC**

Administrateurs systèmes, ingénieurs systèmes et personnels du support technique qui recherchent les connaissances leur permettant d'être autonomes dans la maintenance et le dépannage de leurs infrastructures vSphere.

### **PRÉ-REQUIS**

VMware Certified Professional 6 – Data Center Virtualization (VCP6-DCV)

VMware vSphere: Fast Track [V6]

VMware vSphere: Optimize and Scale [V6]

Equivalent knowledge and administration experience with ESXi and vCenter Server

Experience working with a

### **PROGRAMME**

#### **1. Course Introduction**

Understand the course objectives

Understand the scope and topics covered by the course

Become familiar with online technical resources

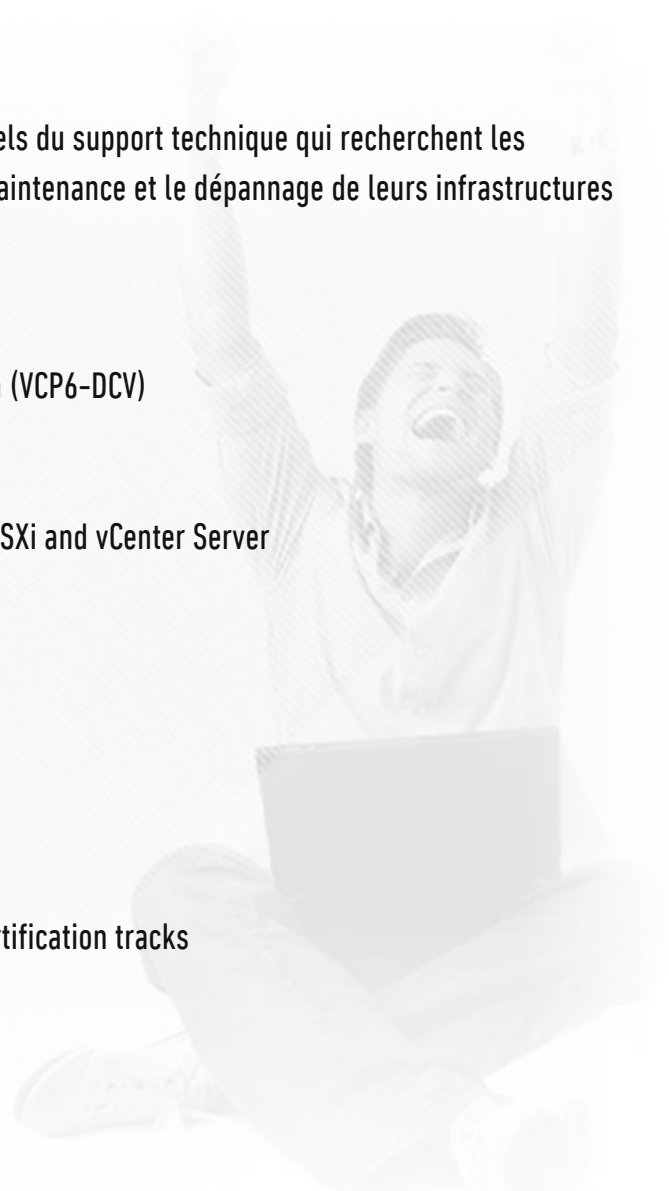
Become familiar with the VMware education system and certification tracks

#### **2. Introduction to Troubleshooting**

Identify the effects of a system problem

Define the troubleshooting scope

Use a structured approach



Understand the troubleshooting principals  
Follow a logical troubleshooting procedure  
Troubleshooting examples

### 3. Troubleshooting Tools

Use command-line tools to identify and troubleshoot problems  
Use VMware vSphere® Management Assistant  
Locate and interpret important log files  
Export relevant log files for technical support  
Use vRealize Log Insight for log aggregation and problem analysis  
Use vRealize Log Insight for efficient log search

### 4. Networking

Identify the symptoms of network-related problems  
Analyze and resolve standard and distributed switch issues  
Analyze virtual machine connectivity issues and restore them  
Examine common management network connectivity issues and restore configurations  
Identify and prevent potential problems

### 5. Storage

Troubleshoot storage (iSCSI, NFS, VMFS, and VSAN) connectivity problems  
Analyze hardware malfunction and software misconfiguration scenarios  
Identify multipathing-related issues, including PDL and APD  
Analyze possible causes, recover from the faulty conditions, and restore storage visibility

### 6. vSphere Clusters

Identify and recover from vSphere HA related issues  
Analyze and troubleshoot various types of vSphere vMotion issues related to virtual machine migrations  
Discuss and recover from vSphere DRS problems to achieve proper function and balanced resource use  
Examine vSphere cluster failure scenarios and possible solutions

### 7. vCenter Server and ESXi

Understand the vCenter Server and Platform Services Controller (PSC) architecture in vSphere 6  
Identify and resolve authentication issues  
Troubleshoot VMware Certificate Authority (VMCA) and certificate store issues  
Analyze and fix vCenter Server services issues

Examine ESXi host and vCenter Server failure scenarios and resolve the issues

## 8. Virtual Machines

Analyze and resolve common virtual machine snapshot issues

Identify possible causes and resolve virtual machine power-on issues

Troubleshoot virtual machine connection state issues

Resolve problems seen during VMware Tools tm installations

Discuss content library and identify common misconfigurations

Examine failure scenarios and provide solutions

