**Manuals+** — User Manuals Simplified.



# vmware vSphere Advanced Administration User Guide

**Contents**

**vmware vSphere Advanced Administration**

## Product Information

- **Product Name:** VMware vSphere: Advanced Administration
- **Length:** 5 days
- **Version:** 8
- **Manufacturer:** Lumify Work
- **Manufacturer Description:** Lumify Work is a VMware Education Reseller Partner (VERP), offering training in vSphere, vRealize, vSAN, Horizon, NSX-T, Workspace ONE, Carbon Black, and other VMware technologies and platforms.

## Why Study This Course:

Learn a range of skills, from performing routine VMware vSphere 8 administrative tasks to complex vSphere operations and configurations. Through lab-based activities, students are immersed in real-life situations faced by VMBeans, a fictitious company.
These situations expose students to real-life scenarios faced by companies that are building and scaling their virtual infrastructure. This course uses scenario-based lab exercises and does not provide guided step-by-step instructions. To complete the scenario-based lab exercises, you are required to analyze the task, research, and deduce the required solution. References and suggested documentation are provided. This course utilizes labs to teach students how to effectively navigate and manage vSphere.

## What You'll Learn:

- Implement solutions for securing the vSphere infrastructure

## Course Subjects:

1. Course Introduction
    - Introductions and course logistics
    - Course objectives

- Lumify Work Customized Training
2. Creating and Configuring Production Clusters
    - Use Cluster Quickstart to create a vSAN-activated cluster
    - Configure advanced vSphere HA settings
    - Configure the vCenter identity provider
    - Assign specific permissions and roles to Active Directory Federation Services (ADFS) users
    - Configure Enhanced vMotion Compatibility on a cluster and a VM

## Product Usage Instructions

To effectively use the VMware vSphere: Advanced Administration course, follow the steps below:

- Step 1: Course Introduction
    - Start by familiarizing yourself with the course objectives and logistics. Understand the customized training options offered by Lumify Work.
- Step 2: Creating and Configuring Production Clusters
    - In this section, you will learn how to create a vSAN-activated cluster using the Cluster Quickstart feature. Additionally, you will configure advanced vSphere HA settings, set up the vCenter identity provider, assign permissions and roles to ADFS users, and configure Enhanced vMotion Compatibility on a cluster and a VM.
    Note: The course does not provide guided step-by-step instructions for the lab exercises. You are required to analyze the tasks, research, and deduce the solutions. References and suggested documentation are provided to assist you.

### Specifications:

- Product Name: VMware vSphere: Advanced Administration
- Length: 5 days
- Version: 8
- Manufacturer: Lumify Work

### Frequently Asked Questions:

**Can I get customized training for larger groups?**
Yes, Lumify Work offers customized training courses for larger groups, which can save your organization time, money, and resources. For more information, please contact Lumify Work at 02 8286 9429.

### LENGTH

- 5 days

### VERSION

- 8

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## Product Alignment

- VMware ESXi 8.0
- VMware vCenter 8.0

## VMWARE AT LUMIFY WORK

VMware is the world leader in server virtualisation technologies. Lumify Work is a VMware Education Reseller Partner (VERP), offering training in vSphere, vRealize, vSAN, Horizon, NSX-T, Workspace ONE, Carbon Black, and other VMware technologies and platforms.

## WHAT YOU'LL LEARN

By the end of the course, you should be able to meet the following objectives:

- Configure VMware vCenter® and VMware ESXi™
- Configure and manage a vSphere cluster solution for vSphere HA, vSphere DRS, and vSAN
- Configure vSphere storage and networking
- Perform lifecycle operations on vSphere components
- Troubleshoot vSphere infrastructure and connectivity issues
- Back up vCenter configurations

**https://www.lumifywork.com/en-ph/courses/vmware-vsphere-advanced-administration-workshop/**

**Implement solutions for securing the vSphere infrastructure**

- My instructor was great being able to put scenarios into real world instances that related to my specific situation.
- I was made to feel welcome from the moment I arrived and the ability to sit as a group outside the classroom to discuss our situations and our goals was extremely valuable.
- I learnt a lot and felt it was important that my goals by attending this course were met.
- Great job Lumify Work team.

**AMANDA NICOL**
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## COURSE SUBJECTS

1. Course Introduction
    1. Introductions and course logistics
    2. Course objectives
2. Creating and Conf figuring out Management Clust ers
    1. Create a vSphere cluster for management workloads
    2. Activate vSphere cluster features that help to improve resource allocation and availability of virtual machines
    3. Use standard virtual switches to create networking in a cluster Select the appropriate vSphere storage types to meet requirements Configure iSCSI storage
    4. Configure VMFS and NFS datastores
    5. Recognize when to configure ESXi NT P and PT P support
    6. Recognize ESXi user account best practices
    7. Configure ESXi host settings
    8. Use vSphere configuration profiles to maintain consistent ESXi host configurations
3. Creating and Configuring Production clusters
    1. Use Cluster Quickstart to create a vSAN-activated cluster
    2. Configure advanced vSphere HA settings
    3. Configure the vCenter identity provider
    4. Assign specific permissions and roles to Active Directory Federation Services (ADFS) users
    5. Configure Enhanced vMotion Compatibility on a cluster and a VM
    6. Perform a Cross vCenter Server migration
    7. Use content libraries to share virtual machine templates between sites
    8. Manage VM and ESXi host resources using resource pools, scalable shares, and vSphere DRS rules
4. Troubleshooting vSphere and Backing Up Configurat ions
    1. Troubleshoot ESXi connectivity issues
    2. Troubleshoot ESXi storage issues
    3. Troubleshoot vSphere cluster issues
    4. Troubleshoot PowerCLI issues
    5. Generate vCenter and ESXi log bundles
    6. Back up vCenter
    7. Create a vCenter profile to standardize configurations in the environment
5. Lif ecycle Management
    1. Troubleshoot upgrade-blocking issues Increase logging levels on vCenter
    2. Configure a VMware Tools™ shared repository Upgrade vCenter
    3. Upgrade ESXi
    4. Upgrade VMware Tools
    5. Upgrade virtual machine hardware compatibility
6. vSphere Security
    1. Configure a key management server
    2. Encrypt virtual machines using vSphere VM encryption
    3. Secure VMs in transit with encrypted vSphere vMotion
    4. Identify and implement different ESXi CPU scheduler options
    5. Apply security hardening guidelines to ESXi hosts

6. Replace vCenter certificates with trusted CA-signed certificates
7. Reconfigure the primary network identifier for a vCenter instance

## WHO IS THE COURSE FOR

- System administrators
- System engineers

## PREREQUISITES

This course requires completion of the following prerequisites:

- VMware vSphere: Install, Configure, Manage
- VMware vSphere: Operate, Scale, and Secure
- Working knowledge of VMware vSAN™
- System administration experience on Microsoft Windows or Linux operating systems

The supply of this course by Lumify Work is governed by the booking terms and conditions . Pleas e read the terms and conditions carefully before enrolling in this cours e, as enrolment in the cours e is conditional on acceptance of thes e terms and conditions .

**ph.training@lumifywork.com**
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## Documents / Resources



**vmware vSphere Advanced Administration** [pdf] User Guide
vSphere Advanced Administration, vSphere, Advanced Administration, Administration

## References

- 🌐 **Lumify Work | Lumify Work AU**
- 🌐 **Lumify Work | Lumify Work AU**
- 🌐 **VMware vSphere: Advanced Administration | Lumify Work PH**
- 🌐 **VMware vSphere: Operate, Scale and Secure | Lumify Work PH**

- **User Manual**