

معاونت پژوهش، برنامه‌ریزی و سنجش مهارت

دفتر پژوهش، طرح و برنامه‌ریزی درسی

استاندارد آموزش شایستگی

VMware vSphere: Install, Configure, Manage [V6] (VCP6-DCV)

گروه شغلی

فناوری اطلاعات

کد ملی آموزش شایستگی

۲	۵	۱	۲	۴	۰	۵	۳	۱	۸	۷	۰	۰	۳	۱
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Ministry of cooperatives
Labour and Social Welfare



Iran Technical and Vocational
Training Organization

Deputy of training
Plan and curriculums office

Competency Training standard

Title

**VMware vSphere: Install, Configure, Manage [V6]
(VCP6-DCV)**

Occupational group

Information Technology (IT)

International code

2513-53-111-1

Date of standard compilation: 2015.05.06

Control of board on content compilation and accreditation: Plan and curriculums office
National code: **2513-53-111-1**

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Cooperator Specialized organizations for compiling the training standard:

- Iran Information Technology Development Co
- Iran Information Technology Development University
- Danesh IT Academy in Tehran, Iran (Danesh-ac.ir)

Revision Process:

- Scientific content
- According to market
- Equipment
- Tools

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4						
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Definitions:

Job standard:

The characteristics ' required competencies and abilities for Efficient Performance in work environment is called "the Job standard", and sometimes “The Occupational standard”

Training standard:

The Training Map for achieving the Job’s subset Competencies.

Job title:

Is a set of Tasks and Abilities which is expected from an employed person in the defined level

Job description:

A statement covering the most important elements of a job, namely the position or title of the job, the duties, job’s relation with other jobs in a occupational field, the responsibilities, workplace conditions and required performance standards.

Course duration:

The minimum of time which is required to achieve the training objects.

Admission requirements:

The minimum of competencies and abilities which are obligatory for a potential admission.

Evaluation:

The process of collecting evidence and judgment about whether a competency is achieved or not.

Include: written examination, practical examination

Required Qualifications for Trainers:

The minimum of Trainer’s technical and vocational abilities which the trainer is required to have.

Competency:

The ability of efficient performing a duty in a variety of workplaces conditions

Knowledge:

The minimum set of facts and mental capacities which is necessary for achieving a competency. This can include science, (Mathematics, physics, chemistry or biology), technology or technical.

Skill:

The minimum coordination between mind and body for achieving an ability or competency. It normally applied to practical skills.

Attitude:

A set of emotional behaviors required for achieving a competency and can have non-technical skills and occupational ethics.

Safety:

The cases which doing or not doing something can cause harm or accident

Environmental Consideration:

A set of consideration about the act which should be done to minimize the environmental damage or pollution.

Competency Title:

VMware vSphere: Install, Configure, Manage [V6] (VCP6-DCV)

Competency Description:

VMware vSphere: Install, Configure, Manage features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 6, which includes VMware ESXi™ 6 and VMware vCenter Server™ 6. This course prepares you to administer a vSphere infrastructure for an organization of any size and forms the foundation for most other VMware technologies in the software-defined data center.

Admission Requirements:

minimum degree of education: Post first year of high school
 minimum physical and mental ability:-
 Prerequisite skills: Network+

Course Duration:

Course duration: 40 hrs.
-Theoretical :10 Hours
-Practical :30 Hours
-Apprenticeship: ... Hours
-Project: ... Hours

Evaluation :(%)

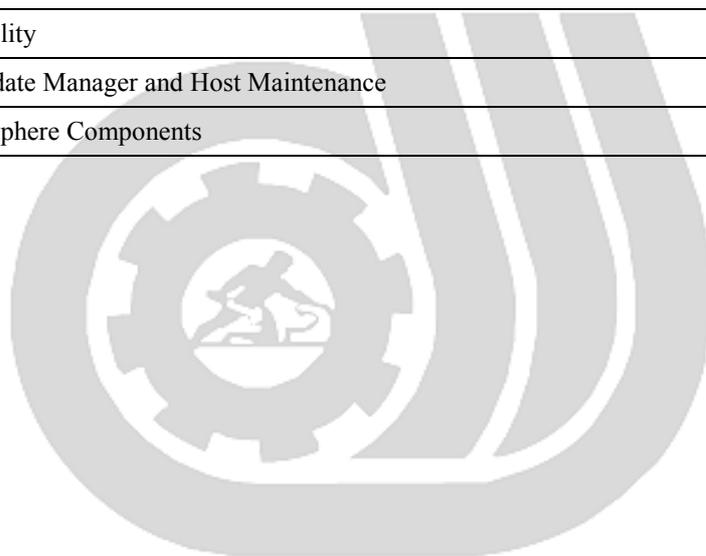
Exam Number: 2V0-621	Duration: 120 Minutes
Associated Certification: VCP6-DCV	Number of Questions: 100
Exam Product: vSphere Version: 6	Passing Score: Not Available for Beta Exams
Recommended Training: vSphere: Optimize and Scale [V6]	Validated Against: vSphere 6
Exam Price: \$50 USD, More on Pricing	Exam Languages: English
First Available Appointment: 13 April 2015	Format: Single and Multiple Choice, Proctored
Exam Details Information Last Updated: 6 April 2015	

Required Qualifications for Trainers:

VCP-DCV degree holders with 2 years experiences

**Competency Training Standard
Tasks**

1	Course Introduction
2	Software-Defined Data Center
3	Creating Virtual Machines
4	vCenter Server
5	Configuring and Managing Virtual Networks
6	Configuring and Managing Virtual Storage
7	Virtual Machine Management
8	Resource Management and Monitoring
9	vSphere HA and vSphere Fault Tolerance
10	Host Scalability
11	vSphere Update Manager and Host Maintenance
12	Installing vSphere Components



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Training standard
Contents analysis form

Title: Course Introduction	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Introductions and course logistics - Course objectives - References and resources	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
Contents analysis form

Title: Software-Defined Data Center	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Introduce components of the software-defined data center - Describe where vSphere fits into the cloud architecture - Install and use vSphere Client - Overview of ESXi	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard

Contents analysis form

Title: Creating Virtual Machines	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Introduce virtual machines, virtual machine hardware, and virtual machine files - Create and work with virtual machines and templates	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
Contents analysis form

Title: vCenter Server	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Introduce the vCenter Server architecture - Deploy and configure vCenter Server Appliance - Use vSphere Web Client - Manage vCenter Server inventory objects and licenses	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
Contents analysis form

Title: Configuring and Managing Virtual Networks	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Describe, create, and manage standard switches - Configure virtual switch security and load-balancing policies - Create, configure, and manage vSphere distributed switches, network connections, and port groups	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
Contents analysis form

Title: Configuring and Managing Virtual Storage	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Introduce storage protocols and storage device types - Discuss ESXi hosts using iSCSI and NFS storage - Create and manage VMFS and NFS datastores - Introduce VMware Virtual SAN™ - Introduce Virtual Volumes	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
Contents analysis form

Title: Virtual Machine Management	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Use templates and cloning to deploy new virtual machines - Modify and manage virtual machines - Perform vSphere vMotion and vSphere Storage vMotion migrations - Create and manage virtual machine snapshots - Create vApps - Introduce the types of content libraries and how to deploy and use them	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Training standard
Contents analysis form

Title: Resource Management and Monitoring	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Introduce virtual CPU and memory concepts - Configure and manage resource pools - Describe methods for optimizing CPU and memory usage - Use various tools to monitor resource usage - Create and use alarms to report certain conditions or events - Identify and troubleshoot virtual machine resource issues - Introduce vRealize Operations Manager for data center monitoring and management	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard

Contents analysis form

Title: vSphere HA and vSphere Fault Tolerance	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Explain the vSphere HA architecture - Configure and manage a vSphere HA cluster - Use vSphere HA advanced parameters - Introduce vSphere Fault Tolerance - Enable vSphere Fault Tolerance on virtual machines - Introduce vSphere Replication - Use vSphere Data Protection to back up and restore data	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
Contents analysis form

Title: Host Scalability	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Describe the functions and benefits of a vSphere DRS cluster - Configure and manage a vSphere DRS cluster - Work with affinity and anti-affinity rules - Use vSphere HA and vSphere DRS together for business continuity	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard

Contents analysis form

Title: vSphere Update Manager and Host Maintenance	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Use vSphere Update Manager to manage ESXi patching - Install vSphere Update Manager and the vSphere Update Manager plug-in - Create patch baselines - Use host profiles to manage host configuration compliance - Scan and remediate hosts	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

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Training standard
Contents analysis form

Title: Installing vSphere Components	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipment's ,tools, materials ,books
Knowledge and Skill: - Install ESXi - Introduce vCenter Server deployment options - Describe vCenter Server hardware, software, and database requirements - Discuss installation of vCenter Server Appliance and a vCenter Server instance - Demonstrate vCenter Server installation	Determined by the instructor			From VMWARE
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				

Equipment & Tools & Materials & Resources (books, site, software...) form

*Required quantity for each 15 Trainees

From VMWARE