



Ministry of cooperatives
Labour and Social Welfare



Iran Technical and Vocational
Training Organization

Deputy of training
Plan and curriculums office

Competency Training standard

Title

70-247:Configuring and Deploying a Private Cloud

Iran Technical and Vocational

Training Organization

Occupational group
INFORMATION TECHNOLOGY (IT)

International code

2523-53-150-1

Date of Standard Compilation: 2016/03/05

Control of board on content compilation and accreditation: Plan and curriculums office
National code: 2523-53-150-1

Member of Specialized commission IT Curriculum development:

- Ali Mosavi: Director Manager of Iran TVTO Curriculum Development Office
- Cirrus Soltani nejad(Head of the General Department of Vocational Hormozgan)
- Ramak Farahabad(Deputy for Planning and Training)
- Golzar nazari gazi(Vice Minister of the General Administration of professional technical and Hormozgan)
- fatemeh taheeri (Expert technical and vocational education, the Department of Hormozgan)
- Asma Karimi: Director of Information Technology Training Center in Bandar Abbas
- mohamamd reza kanjeh moradi: Director Manager of Iran TVTO Curriculum Development Office
- Shahram Shokofian: Manager of Iran TVTO IT Curriculum Development

Cooperator Specialized organizations for compiling the training standard :

- Kharazmi Technical and Vocational Training Institute
- Kharazmi IT Academy Technical and Vocational Training Institute
- Jahan Danesh Kharazmi Co. Bandar Abbas, Iran

Revision Process:

- Scientific content
- According to market
- Equipment
- Tools

Plan & Curriculum Office
97, nosrat avenue –Tehran, Iran

Tel:+98-21-66569900-9

Fax: +98-21-66944117

E-mail:Barnamehdarci@yahoo.com

	Name & family name	Academic document	field	Job & post	Relevant experiences	Add & Tel & Email
1	Abdolreza Yousefi	B.S	Business Management	Manager	Kharazmi Institute Jahan Danesh Kharazmi CO.	Hormozgan 09176798363 ykharazmi@yahoo.com
2	Ezat Heiat Hossinian	M.SC	Software engineer	Manager	Kharazmi Institute Jahan Danesh Kharazmi CO.	Hormozgan 09179542551 e-hoossini@kharazmi- ir.com
3	Fatemeh Vakili	B. SC	Software engineer	Computer Coach	Kharazmi Technical and Vocational Training Institute	Hormozgan 09391724144
4	Parsa Yousefi	Diploma	Network Engineer	Technical Engineer	Kharazmi Institute Jahan Danesh Kharazmi CO.	Hormozgan P.yousefi97@gmail.com
5						
6	<i>Iran Technical and Vocational Training Organization</i>					
7						
8						
9						

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:**Configuring and Deploying a Private Cloud****Competency Description:**

Prove your expertise in managing and implementing Microsoft private cloud computing technologies. With Windows Server and System Center, you will build your Microsoft private cloud solution to optimize IT service delivery and gain the automation and flexibility you need for your IT infrastructure, now and in the future.

Admission Requirements:

minimum degree of education: Post first year of high school

minimum physical and mental ability:-

Prerequisite skills: Comptia Network+ & Microsoft MCSA

Course duration:

Course duration: 40 hours

-Theoretical :10Hours

-Practical :30 Hours

-Apprenticeship:... Hours

-Project:... Hours

Evaluation :(%)

Published:	April 7, 2014
Audiences:	IT Professionals
Number of questions	
Exam Number	70-247
Technology	Microsoft System Center 2012 and Microsoft System Center 2012 R2

IRANTVTO Evaluation :(%)

Written Examination:25%

Practical Examination:65%

Ethics:10%

Required Qualifications for Trainers:

Computer or IT or ART related Bachelor with 2 years' experience

Competency Training Standard

Competencies

	Title
1	Planning for the Cloud
2	Configuring and Deploying the Private Cloud with Microsoft System Center 2012 R2 Virtual Machine Manager
3	Extending and Maintaining Cloud Infrastructure
4	Configuring Application Delivery
5	Creating the Private Cloud Building Blocks
6	Deploying and Configuring Access to a Private Cloud
7	Monitoring Cloud Infrastructure
8	Extending and Customizing Monitoring of the Cloud Infrastructure
9	Implementing Service Management for the Cloud
10	Configuring High Availability, Disaster Recovery and Protection for a Cloud
11	Automating and Standardizing a Cloud
12	Configuring a Self-Service Multi-Tenant Cloud with the Windows Azure Pack

*Iran Technical and Vocational
Training Organization*

Training standard

Contents analysis form

Title: Planning for the Cloud	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Understanding Cloud Models - Benefits for Deploying a Private Cloud - Designing a Private Cloud Infrastructure - Overview of Windows Server 2012 R2 Hyper-V - Overview of System Center 2012 R2 Components - Deploying Hyper-V Clustering with VMM - Deploying the Virtual Machine Manager agent - Confirming the Hyper-V Hosts and Virtual Machines are being managed by VMM	Determined by the instructor			From Microsoft
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: Configuring and Deploying the Private Cloud with Microsoft System Center 2012 R2 Virtual Machine Manager	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Overview of VMM Architecture and Components - Configuring Advanced Networking in VMM - Installing and Upgrading VMM - Configuring VMM Security and Roles - Understanding Host Groups - Configuring Host Groups - Configuring User Roles and Run As Accounts - Configuring the Library - Preparing the Private Cloud Infrastructure - Deploying a New Virtual Machine	Determined by the instructor			From Microsoft
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:	time			
	theoretical	practical	total	
Extending and Maintaining Cloud Infrastructure	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Overview of the PXE and Update Server Roles - Deploying Bare-Metal Hyper-V Host Servers - Configuring the Update Server Role - Creating and Using an Update Baseline - Configuring a PXE Server in VMM - Configuring a Physical Computer Profile - Configuring an Update Server Role in VMM - Configuring a Software Update Baseline in VMM	Determined by the instructor			From Microsoft
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:	time			
	theoretical	practical	total	
	<ul style="list-style-type: none"> Configuring Application Delivery 	Determined by the instructor		
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: <ul style="list-style-type: none"> - Dynamic Application Deployment Overview - Web Deployment Packages - Server Application Virtualization Overview - Configuring Server App-V Components - Sequencing and Deploying Virtual Applications - Configuring the Server App-V Sequencer - Configuring the Server App-V Agent - Sequencing an Application - Testing the Server App-V Package Deployment 	Determined by the instructor			From Microsoft
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:	time			
	theoretical	practical	total	
Creating the Private Cloud Building Blocks	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Configuring Guest Operating System Profiles - Configuring Hardware Profiles - Configuring SQL Server Using SQL Server Profiles - Configuring Application Profiles - Configuring Virtual Machine Templates - Configuring Service Provider Foundation - Configuring User Roles - Configuring Profiles - Configuring a Service Template	Determined by the instructor			From Microsoft
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: Deploying and Configuring Access to a Private Cloud	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Understanding Private Cloud Computing - Installing and Configuring App Controller - Creating and Managing Service Templates - Creating and Configuring a Private Cloud - Creating, Deploying and Managing Services	Determined by the instructor			From Microsoft
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:	time		
	theoretical	practical	total
Monitoring Cloud Infrastructure	Determined by the instructor		
Knowledge ,skill ,attitude ,safety, Environmental Consideration			Equipments ,tools, materials ,books
Knowledge and Skill: - Operations Manager Architecture and Security - Operations Manager Installation Considerations - Configuring User Roles and Notifications - Configuring Management Packs - Configuring Integration with System Center 2012 R2 - Deploying Agents - Deploying and Configuring Management Packs - Configuring VMM Integration - Configuring DPM Integration	Determined by the instructor		From Microsoft
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:	time			
	theoretical	practical	total	
Extending and Customizing Monitoring of the Cloud Infrastructure	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Configuring System Center Advisor - Configuring the SharePoint Server Portal - Monitoring Templates - Distributed Application Monitoring - Creating Custom Monitoring - Creating a Distributed Application - Configuring Service Level Tracking - Creating Views for Private Cloud Infrastructure Scenario	Determined by the instructor			From Microsoft
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:	time			
	theoretical	practical	total	
Implementing Service Management for the Cloud	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Service Manager Architecture Overview - Upgrading to System Center 2012 R2 Service Manager - Understanding Service Manager Work Items - Configuring Service Manager Connectors - Configuring Service Manager Notifications LABS: - Configuring Service Manager Basic Settings - Configuring Service Manager Connectors - Configuring the Self-Service Portal - Configuring Notifications	Determined by the instructor			From Microsoft
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

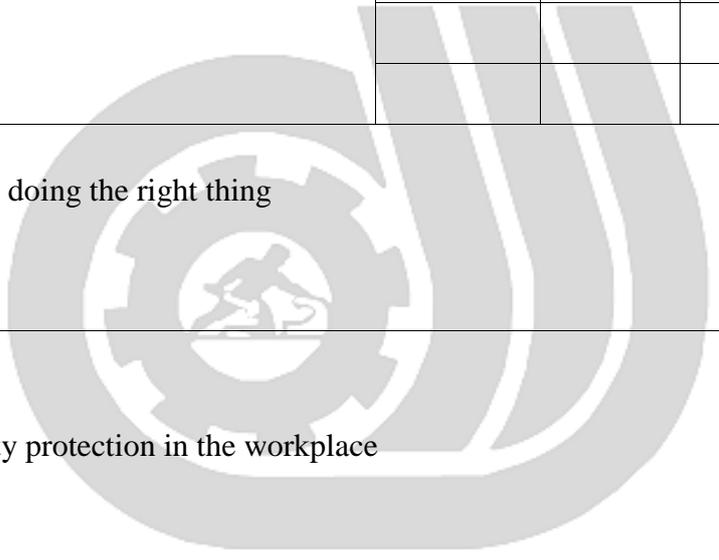
Title:	time			
	theoretical	practical	total	
	Configuring High Availability, Disaster Recovery and Protection for a Cloud	Determined by the instructor		
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Planning for Azure Site Recovery - Planning DPM Deployment - DPM Architecture and Components - Upgrading DPM - Configuring DPM for the Private Cloud - Configuring Application Protection for a Cloud - Restoring Applications to the Cloud Labs: - Configuring the Storage Pool - Deploying DPM Protection Agents - Creating and Configuring Protection Groups - Configuring SQL Server Self-Service Recovery - Restoring Data from a SQL Server Protection Group Group - Performing Self-Service Recovery of SQL Server Data	Determined by the instructor			From Microsoft
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:	time			
	theoretical	practical	total	
	Automating and Standardizing a Cloud	Determined by the instructor		
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Orchestrator Architecture and Components Overview - Deploying and Configuring Core Components - Managing Runbooks - Configuring Integration Packs Labs: - Deploying a Runbook Server and Configuring Integration Packs - Configure a Template to Deploy Agents on a New Virtual Machine - Creating a Runbook to Protect All Resources on a Virtual Machine Scenario	Determined by the instructor			From Microsoft
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: Configuring a Self-Service Multi-Tenant Cloud with the Windows Azure Pack	time			
	theoretical	practical	total	
	Determined by the instructor			
Knowledge ,skill ,attitude ,safety, Environmental Consideration				Equipments ,tools, materials ,books
Knowledge and Skill: - Configuring the Windows Azure Pack Labs : - Configuring the Windows Azure Pack	Determined by the instructor			From Microsoft
Attitude: Speed and accuracy in doing the right thing				
Health & Safety: Compliance with safety protection in the workplace				
Environmental Consideration: Compliance with environmental protection				



Iran Technical and Vocational Training Organization