Ministry of cooperatives
Labour and Social Welfare

Iran Technical and Vocational
Training Organization

Deputy of training
Plan and curriculums office

Competency Training standard

Title

NetApp Certified Data Administrator(NCDA)
NS0-157

Occupational group

INFORMATION TECHNOLOGY (IT)

Iran Technical and Vocational Training Organization

International code

2523-53-157-1

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Member of Specialized commission IT Curriculum development:
-Ali Mosavi: Director Manager of Iran TVTO Curriculum Development Office
-Hassan Solimany: Member of Iran TVTO IT Curriculum Development
-Sarang Ghorbanian: Member of Iran TVTO IT Curriculum Development
-Dariush Esmaeili: Member of Iran TVTO IT Curriculum Development
-Ehsan Pouri: Member of Iran TVTO IT Curriculum Development
- 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**

Iran Technical and Vocational Training Organization

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
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Iran Technical and Vocational Training Organization

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 wetter 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.

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Competency Title:

NetApp Certified Data Administrator(NCDA)

Competency Description:

NetApp Certified Data Administrators have proven skills in performing in-depth support, administrative functions, and performance management for NetApp® data storage controllers running the Data ONTAP® operating system in NFS and Windows® (CIFS) multiprotocol environments. They are able to implement high-availability controller configurations. They also have detailed knowledge of SnapMirror®, SnapRestore®, and SnapVault® technologies, which they use to manage and protect mission-critical data.

Admission Requirements:

minimum degree of education: Post first year of high school

minimum physical and mental ability:-

Prerequisite skills: Comptia Network+ Certification & Microsoft MCSA

Course duration:

Course duration: 52 hours

-Theoretical :12 Hours

-Practical :40 Hours

-Apprenticeship:… Hours

-Project:… Hours

Evaluation :(%)

Exam Time for Native English speakers	**90 minutes**
Exam Time for Non-native English speakers	**120 minutes**
Number of questions	**55-65**
Exam Number	**NS0-157**
Associate Certification	**NetApp Certified Data Administrator**

Iran Technical and Vocational Training Organization

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	Architecture
2	Core clustered Data ONTAP
3	High Availability
4	Protocol Administration
5	Networking
6	Storage
7	Performance
8	Security
9	Data Protection

Iran Technical and Vocational Training Organization

Training standard

Contents analysis form

<table>
<tr><td rowspan="2">Title:
Architecture</td><td colspan="3">time</td><td rowspan="2"></td></tr>
<tr><td>theoretical</td><td>practical</td><td>total</td></tr>
<tr><td colspan="3">Determined by the instructor</td></tr>
<tr><td colspan="4">Knowledge ,skill ,attitude ,safety, Environmental Consideration</td><td>Equipments ,tools, materials ,books</td></tr>
<tr><td>Knowledge and Skill:
- Concepts and components of a NetApp® storage architecture
- Configurations supported by the clustered Data ONTAP® OS
- Supported hardware configurations for clusters and controllers/nodes</td><td colspan="3">Determined by the instructor</td><td rowspan="4">From NetApp</td></tr>
<tr><td>Attitude:
Speed and accuracy in doing the right thing</td><td colspan="3"></td></tr>
<tr><td>Health & Safety:

Compliance with safety protection in the workplace</td><td colspan="3"></td></tr>
<tr><td>Environmental Consideration:
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Core clustered Data ONTAP</td><td colspan="3">time</td><td rowspan="2"></td></tr>
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<tr><td colspan="4">Knowledge and Skill:
- Clustered Data ONTAP components and features
- Concepts, operation, and functionality of Snapshot copies
- Storage efficiency features and functionalities
- Use of management tools</td><td rowspan="5">From NetApp</td></tr>
<tr><td colspan="3">Determined by the instructor</td></tr>
<tr><td></td><td></td><td></td></tr>
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High Availability</td><td colspan="3">time</td><td rowspan="2"></td></tr>
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<tr><td colspan="4">Knowledge ,skill ,attitude ,safety, Environmental Consideration</td><td>Equipments ,tools, materials ,books</td></tr>
<tr><td>Knowledge and Skill:
- Configure, monitor, and troubleshoot high-availability features
-Failover functionality and operation</td><td colspan="3">Determined by the instructor</td><td rowspan="5">From NetApp</td></tr>
<tr><td></td><td></td><td></td></tr>
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Protocol Administration</td><td colspan="3">time</td><td rowspan="2"></td></tr>
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<tr><td colspan="4">Knowledge ,skill ,attitude ,safety, Environmental Consideration</td><td>Equipments ,tools, materials ,books</td></tr>
<tr><td>Knowledge and Skill:
- Configure, monitor, and troubleshoot NAS protocols and solutions
- Configure, monitor, and troubleshoot SAN protocols and solutions</td><td colspan="3">Determined by the instructor</td><td rowspan="5">From NetApp</td></tr>
<tr><td></td><td></td><td></td></tr>
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<tr><td rowspan="2">Title:
Networking</td><td colspan="3">time</td><td rowspan="2"></td></tr>
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<tr><td colspan="4">Determined by the instructor</td></tr>
<tr><td colspan="4">Knowledge ,skill ,attitude ,safety, Environmental Consideration</td><td>Equipments ,tools, materials ,books</td></tr>
<tr><td rowspan="5">Knowledge and Skill:
- Network concepts and components
- Configure, monitor, and troubleshoot network features and components</td><td colspan="3">Determined by the instructor</td><td rowspan="5">From NetApp</td></tr>
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Storage</td><td colspan="3">time</td><td rowspan="2"></td></tr>
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<tr><td></td><td colspan="3">Determined by the instructor</td><td></td></tr>
<tr><td colspan="4">Knowledge ,skill ,attitude ,safety, Environmental Consideration</td><td>Equipments ,tools, materials ,books</td></tr>
<tr><td>Knowledge and Skill:
- Create, configure, and expand aggregates
- Create and configure volumes
- Disks, disk shelves, and RAID groups</td><td colspan="3">Determined by the instructor</td><td rowspan="4">From NetApp</td></tr>
<tr><td>Attitude:
Speed and accuracy in doing the right thing</td><td colspan="3"></td></tr>
<tr><td>Health & Safety:

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Performance</td><td colspan="3">time</td><td rowspan="2"></td></tr>
<tr><td>theoretical</td><td>practical</td><td>total</td></tr>
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<tr><td colspan="4">Knowledge ,skill ,attitude ,safety, Environmental Consideration</td><td>Equipments ,tools, materials ,books</td></tr>
<tr><td>Knowledge and Skill:
- Administer performance tools and output
- Usage and rules for storage tiering</td><td colspan="3">Determined by the instructor</td><td rowspan="5">From NetApp</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
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<tr><td colspan="4">Knowledge ,skill ,attitude ,safety, Environmental Consideration</td><td>Equipments ,tools, materials ,books</td></tr>
<tr><td>Knowledge and Skill:
- Security concepts, strategies, and configurations</td><td colspan="3">Determined by the instructor</td><td rowspan="5">From NetApp</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
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Data Protection</td><td colspan="3">time</td><td rowspan="2"></td></tr>
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<tr><td colspan="4">Determined by the instructor</td></tr>
<tr><td colspan="4">Knowledge ,skill ,attitude ,safety, Environmental Consideration</td><td>Equipments ,tools, materials ,books</td></tr>
<tr><td rowspan="6">Knowledge and Skill:
- NetApp storage protection concepts, operations, and functionalities
- Configure, administer, and troubleshoot SnapMirror and SnapVault technology</td><td colspan="3">Determined by the instructor</td><td rowspan="6">From NetApp</td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td></tr>
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