**UNIT ID:2321** 

# Domain COMPUTER SYSTEM SUPPORT

Title: Demonstrate an understanding of in server administration

Level: 3 Credits: 10

## <u>Purpose</u>

This unit standard is intended for those who demonstrate an understanding of in server administration. People credited with this unit standard are able to plan and execute server deployment, apply knowledge of server management, plan and perform network access, demonstrate knowledge of operating system CLI (Command Line Interface), apply knowledge of server administration using operating systems.

This unit standard is intended for those who work as computer system supporters.

## **Special Notes**

1. Entry information:

Prerequisites:

- None
- 2. This unit standard is to be delivered and assessed in the context of information and communication technology.
- 3. Assessment evidence may be collected from a real or a simulated workplace in which ICT operations are carried out.
- 4. Tools and equipment may include but are not limited to computer, external devices, storage devices and other and basic computer applications.
- 5. Performance of all elements in this unit standard must comply with industry standards.
- 6. Regulations and legislation relevant to this unit standard include the following:
  - Labour Act 2007(Act No 11, 2007).
  - Regulations relating to the health & safety of employees at work under schedule 1 (2) of the Labour Act No.11 of 2007 and all subsequent amendments.

## **Quality Assurance Requirements**

This unit standard and others within this sub-field may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training

Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority on <a href="https://www.namqa.org">www.namqa.org</a> and the Namibia Training Authority on <a href="https://www.nta.com.na">www.nta.com.na</a>

## **Elements and Performance Criteria**

### **Element 1: Plan and execute Server Deployment**

### **Range**

Server installations and upgrades may include, but is not limited to, Windows Server 2012 edition selection, rollback planning, bitlocker, implementation requirements.

Automated server deployment may include, but is not limited to, standard server image, automation and scheduling of server deployments.

Server infrastructure services may include, but is not limited to, address assignment, name resolution, network access control, directory services, application services, certificate services, remote access service, FTP, HTTPS, SMTP, POP3 and windows deployment services.

Server infrastructure roles may include but is not limited to file server, print server, application server, mail server, terminal server, remote access server, domain controllers, DNS ,DHCP server , streaming and media server.

Application servers and services may include, but is not limited to, virtualization server planning, availability, resilience, and accessibility.

File and print server may include but is not limited to, access permissions, storage quotas, replication, indexing, file storage policy, availability, printer publishing.

#### **Performance Criteria**

- 1.1 Server deployment procedures are explained.
- 1.2 Server installations and upgrades are performed.
- 1.3 Automated server deployment is demonstrated and applied.
- 1.4 Server infrastructure services are explained.
- 1.5 Server infrastructure roles are explained.
- 1.6 Application servers' services are identified and applied.

## **Element 2: Apply knowledge of server management**

## **Range**

Server management tasks may include, but is not limited to, remote administration, remote desktop, server management technologies, server manager and server manager CMD, delegation policies and procedures.

Delegated administration may include, but is not limited to, delegate authority, delegate active directory objects, application management.

Group policy strategy may include, but is not limited to, GPO management, GPO backup and recovery, group policy troubleshooting, group policy planning.

## Performance Criteria

- 2.1 Server management tasks are explained and performed.
- 2.2 Administration roles are explained and delegated.
- 2.3 Organisational policies and strategies are implemented.

## **Element 3: Plan and perform network access**

## **Range**

Name resolution and IP addressing may include, but is not limited to, internal and external naming strategy, naming resolution support for legacy clients, naming resolution for directory services, IP addressing scheme, TCP/IP.

Network access design may include, but is not limited to, network access policies, remote access strategy, perimeter networks, server and domain isolation.

Network resources may include, but is not limited to, application services, printing services and file sharing services.

Objects may include but are not limited to groups, users, devices and policies.

#### **Performance Criteria**

- 3.1 Name resolution and IP addressing system is illustrated and applied.
- 3.2 Network access design is performed.
- 3.3 Network resources are assigned to objects.

## Element 4: Demonstrate knowledge of operating system CLI (Command Line Interface).

## **Range**

Shells may include, but not limited to, Korn, Bash and DOS shells.

Shell scripts may include, but not limited to, create, execute, and debug simple shell scripts.

## Performance criteria

- 4.1 Command Line Interface (CLI) scripts and commands for several operating systems are explained.
- 4.2 Command Line Interface (CLI) scripts are demonstrated.

## Element 5: Apply knowledge of Server Administration using operating systems

### **Performance Criteria**

- 5.1 User Authentication and user authorization are performed.
- 5.2 User Ids (Identifications) are constructed and implemented.
- 5.3 Password protocols are explained and applied.
- 5.5 Login restrictions are illustrated and implemented.
- 5.5 User policies are explained.
- 5.6 Remote administration services are demonstrated.

## **Registration Data**

Subfield:	Information and Communication Technology
Date first registered:	30 July 2020
Date this version registered:	30 July 2020
Anticipated review:	2025
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Body responsible for review:	Namibia Training Authority