

# Unit 127: Microsoft Windows Server 2008, Active Directory, Configuring (70-640)

**Unit code:** M/502/3650

**QCF Level 3:** BTEC in IT

**Credit value:** 13

**Guided learning hours:** 90

## ● Aim and purpose

The Microsoft Certified Technology Specialist (MCTS) on Windows Server 2008 credential is intended for IT professionals who work in the corporate networks to the internet.

## ● Unit introduction

This unit is a comprehensive introduction to the principles of Microsoft Windows Server 2008, Active Directory system support enabling a learner to explore the range of techniques and skills common to the utilisation of this network directory infrastructure in a commercial environment.

The unit explores the management of a Windows Server 2008, Active Directory operating system, configuring zones, interacting with DNS, configuring DNS. Creating a forest or a domain, configuring and establish trusts. Managing active director sites, replication and global catalogues.

Learners will configure Windows Server 2008, Active Directory to interact with Lightweight Directory service, establish user, device, system and file rights. Managing the policies for directory accounts and group policy objects. As well as authenticate security with certification policies, settings, enrolments and certificate revocations.

Microsoft link with a range of different partners to offer a range of learning resources, where learners and centres can access these through Microsoft's Academic learning programme. To attain a pass, learners must take the Microsoft 70-640 certification exam. To view general information about Microsoft objectives please visit: <https://www.microsoft.com/education/MSITAcademy/default.mspx> where the detailed scope and sequence for all certifications are available for anyone to download.

## ● Learning outcomes

**On completion of this unit a learner should:**

- 1 configure Domain Name System (DNS) for Active Directory
- 2 configure the Active Directory infrastructure
- 3 configure additional Active Directory server roles
- 4 create and maintaining Active Directory objects
- 5 maintain the Active Directory environment
- 6 configure Active Directory Certificate Services.

## **Unit content in relation to the Merit and Distinction Criteria**

*Active Directory Environment:* eg DNS server settings, zone transfers, replications, forest configuration, domain configuration, trust configuration, site configuration, global catalogue, operations masters, Lightweight Directory Service, Rights Management, domain controllers, federation services

*Active directory objects:* eg user accounts, active directory accounts, group policy objects, group policy templates, software deployment group policy objects, account policies, audit policy,

*Security:* eg backup, recovery, offline maintenance, monitoring, certificate services, enrolment, certificate revocation, rights

## Assessment and grading criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria for a pass grade describe the level of achievement required to pass this unit.

Assessment and grading criteria		
To achieve a pass grade the evidence must show that the learner is able to:	To achieve a merit grade the evidence must show that, in addition to the pass criteria, the learner is able to:	To achieve a distinction grade the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
<p><b>Pass the Microsoft 70-640 certification exam.</b></p> <p>The centre will evidence this with a copy of the learners results, the learner MUST PASS at the minimum set by Microsoft.</p>	<p><b>M1</b> plan the deployment Windows Server 2008, Active Directory environment [IE, CT]</p>	<p><b>D1</b> critically Test and troubleshoot the active directory environment [IE, CT, SM]</p> <p><b>D2</b> evaluate the security of the active directory objects. [SM, IE]</p>
	<p><b>M2</b> design active directory objects [IE, SM]</p>	
	<p><b>M3</b> implement a Windows 2008, active directory environment [TW, EP, SM]</p>	
	<p><b>M4</b> implement active directory objects. [TW, EP, SM]</p>	

**PLTS:** This summary references where applicable, in the square brackets, the elements of the personal, learning and thinking skills applicable in the pass criteria. It identifies opportunities for learners to demonstrate effective application of the referenced elements of the skills.

Key	IE – independent enquirers CT – creative thinkers	RL – reflective learners TW – team workers	SM – self-managers EP – effective participators

# Essential guidance for tutors

## Delivery

Microsoft courses and associated certifications are delivered as part of an academic programme available to centres in UK and Eire. Centres may only access this certification's associated discounts from within this programme are advised to seek guidance on what current courses comprise the study/delivery required for learners to access the certification.

If learners are taking Microsoft study as part of their BTEC programme, it is recommended that both programmes of study are integrated. Practical and theory tasks for the Microsoft programme can be integrated into the study required for the merit and distinction criteria within this unit.

The outcomes of this unit are synergic with the other Microsoft units as well as those offered by Cisco, CompTIA and VMWare, where there are considerable differences. This unit may be delivered in parallel or in sequence. Units in computer hardware, software installation, systems support and networking, that are both BTEC specific as well as from other vendors may be taught in conjunction with the Microsoft units to enhance the learners experience.

## Outline learning plan

Microsoft as part of the their academy programme, provide learning plans and study guidance for their courses. Microsoft suggest an estimated 75 hours of delivery to attain the pass criteria, in line with QCF credit and notional learning hours. The notional hours for managed learning is set at 40 for learners to attempt the merit and distinction.

## Assessment

To achieve a pass grade, learners must pass the Microsoft 70-640 examination.

### Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the merit and distinction criteria in the assessment and grading grid. This is for guidance and it is recommended that centres either write their own assignments or adapt any Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
M1, M2	Design a Windows Server 2008, Active Directory system	Learners will plan the installation of Windows Server 2008 on an installation environment of choice.	Report/Presentation.
M3, M4, D1, D2	Install the Windows Server 2008, Active Directory system	Learners will configure Windows Server 2008 client configuration and test/troubleshoot the active directory environment and security of active directory objects.	Observation/Practical/Report/Presentation.

## **Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications**

To be completed, links to 6.1 of the NOS and may be co-presented with all other Microsoft modules.

### **Essential resources**

As members of the Microsoft academic programme, centres may choose to access a range of teaching and assessment practice resources. The technological requirement for this unit does not demand any more than the 'average' centre is already providing for a computer systems session, old computers, spare components, replacement parts will enhance the learning experience. Many installation versions of Microsoft products exist, that are easy to install in both desktop and server versions and now comparable in support and management terms to other popular operating systems. This unit can be delivered using virtual machines, where Microsoft Virtual PC may be used, or Oracle Virtual Box which can be run on a wide range of platforms.

### **Employer engagement and vocational contexts**

Microsoft certification is internationally recognized by a diverse range of employers (from SME's to large corporations) as one of the principal certifications in systems support and maintenance.

### **Indicative reading for learners**

For access to the Microsoft academic programme resources and more information on joining the programme, please visit <https://www.microsoft.com/education/MSITAcademy/default.aspx>

## Delivery of personal, learning and thinking skills

The table below identifies the opportunities for personal, learning and thinking skills (PLTS) that have been included within the pass assessment criteria of this unit.

Skill	When learners are ...
Independent enquirers	The pass criteria is set by an examination, the PLTS of self management and reflective learning is supported by the learner, taking personal study and revision in advance of the Examination.
Creative thinkers	
Reflective learners	
Team workers	
Self-managers	
Effective participators	

Although PLTS are identified within this unit as an inherent part of the assessment criteria, there are further opportunities to develop a range of PLTS through various approaches to teaching and learning.

Skill	When learners are ...
Independent enquirers	planning the active directory installation along with active directory objects
Creative thinkers	planning the active directory installation along with active directory objects
Reflective learners	planning the active directory installation along with active directory objects
Self-managers	implementing and testing the active directory infrastructure.

## ● Functional Skills – Level 2

Skill	When learners are ...
<b>ICT – Use ICT systems</b>	
Select, interact with and use ICT systems independently for a complex task to meet a variety of needs	Implementing, testing and troubleshooting the active directory infrastructure
Manage information storage to enable efficient retrieval	Implementing, testing and troubleshooting the active directory infrastructure
Follow and understand the need for safety and security practices	Implementing, testing and troubleshooting the active directory infrastructure
Troubleshoot	Implementing, testing and troubleshooting the active directory infrastructure
<b>English</b>	
Speaking and listening – make a range of contributions to discussions and make effective presentations in a wide range of contexts	Evaluating the security of the active directory objects
Reading – compare, select, read and understand texts and use them to gather information, ideas, arguments and opinions	Evaluating the security of the active directory objects.