

# **Day 1**

## **IT Network Systems Administration – Trade 39**

### **WSC 2011 London**

## Overview

1	EXAM .....	3
1.1	CONTENTS .....	3
1.2	INTRODUCTION .....	3
1.3	DESCRIPTION OF PROJECT AND TASKS .....	3
1.4	PART 1 .....	3
1.5	PART 2 .....	4
1.6	PART 3 .....	4
1.7	PART 4 .....	5
1.8	PART 5 .....	5
2	APPENDIX .....	5
2.1	Specifications .....	5
2.1.1	WINDOWS SERVER SPECIFICATIONS .....	5
2.1.2	ACTIVE DIRECTORY USERS .....	6
2.1.3	LINUX SERVER SPECIFICATIONS .....	6
2.1.4	NETWORK SPECIFICATIONS .....	6
2.1.5	PRINTER SPECIFICATIONS .....	6
2.1.6	NOTEBOOK SPECIFICATIONS .....	6
2.1.7	HTML code .....	6
2.1.8	WLAN SPECIFICATIONS .....	7
2.1.9	NETWORK DIAGRAM .....	8
2.2	INSTRUCTIONS .....	9
2.2.1	INSTRUCTIONS TO THE COMPETITOR .....	9
2.2.2	EQUIPMENT, MACHINERY, INSTALLATIONS (PREINSTALLED) AND MATERIALS REQUIRED .....	9

# 1 EXAM

## 1.1 CONTENTS

This Test Project proposal consists of the following document/file:

1. TP39\_day1-v3.6

## 1.2 INTRODUCTION

The competition has a fixed start and finish time. You must decide how to best divide your time.

On the IP Plan, X represents your Workstation number.

Note VMWare turn on slowly.

**Don't open or try to go on VMWare Virtual Network Editor because all configurations have been made. If you go on it, you will have to logoff or restart the computer.**

## 1.3 DESCRIPTION OF PROJECT AND TASKS

You and your friends decided to found a company called "excellondon.org". As small start-up business you have to save as much money as possible. Fortunately you have a lot of IT experience and you agree to configure the IT environment. The hardware machines are already setup by your assistant, so you have to just install the services.

You'll find additional information as attachment.

## 1.4 PART 1

### PC Host

The PC has been preinstalled with:

- Windows Seven as OS
- VMWARE Workstation
- Packet Tracer

### Work task virtual Server 2008

Note: Please use the default configuration if you are not given the details.

Use the already basic installed Windows 2008 server in VMWare.

Use the Ethernet port on the motherboard.

- Please configure the server with the settings specified in the Appendix
- Install the services
  - Configure Active Directory
    - Create the Active Directory accounts with the information from appendix
  - DNS
    - Create an reverse zone for the inside IP range
  - DHCP Server
    - Scope name : LAN
    - Range: 192.168.X0.128 – 192.168.X0.247 (Eg: 192.168.10.0, X is 1)

- DNS: 192.168.X0.2
- Shared folders
  - Create a shared folder on device D:\ with the name “company”
  - Allow read access for all domain users, write access is only allowed for administrators and user “support”
  - Disable Firewall on the server

### Work task virtual Server Linux

Use the Ethernet port on the top (additional card).

- Set up the server with the operating system preinstalled.
- Please configure the server with the settings specified in the Appendix
- Create 5 users (user01 to user05) with the password 123456
- Install the services
  - Webserver (Apache2)
    - Install Apache2
    - Modify the default page with the code in appendix
    - Users access to this server by:
      - <http://www.excellondon.org>
    - Enable HTTPS access.
    - Create virtual webpages for user01 to user05
      - URL: [HTTP://www.excellondon.org/~user01](http://www.excellondon.org/~user01) to user05”
  - FTP
    - Install FTP server
    - Each AD user (user01 to user05) will have a home directory. Users must have access to update their own webpage via FTP.

## 1.5 PART 2

### Work Task Cisco Linksys E2000

Note: Please use the default configuration if you are not given the details.

- Connect the LAN cables and configure IP addresses based on the appendix network diagram
  - Use port 1 for the Windows Server
  - Use port 2 for the Linux Server
  - The other ports are for client devices such as the notebook
- Configure the access point with the settings specified in the appendix
  - Use London2011 as static WPA2 personal key

## 1.6 PART 3

### Work Task Notebook

Note: Please use the default configuration if you are not given the details.

- Connect the Notebook to the Wireless network
- Join notebook into the domain
- Make sure that every domain user that logs on has the share “company” mapped as network drive “z: It must be done from Active Directory.
- Disable the Firewall

## 1.7 PART 4

### Work Task Printing system

Setup the printer on laptop by using USB cable. Share the printer by using “printer” as the share name. Install software provided on the CD and scan your accreditation, put the file (accreditation.jpg) on the company share and print it.

## 1.8 PART 5

### Packet Tracer Activity

You will have a Packet Tracer **Challenge** to complete in 1hour 15 minutes.

The Jury will give you before the start an USB Key with PKA file and instructions.

You have to save your work regularly using filename convention „countryname-VX.pka“ to be sure that you do not loose your work.

At the end of the challenge, put your work on the USB Key and give it to the Jury.

## 2 APPENDIX

### 2.1 Specifications

#### 2.1.1 WINDOWS SERVER SPECIFICATIONS

Computer name:	excellondonsrv1
Domain name:	excellondon.org
User name:	Administrator
Administrator password:	London2011
IP address:	192.168.X0.2
Partition C:	50 GB
Partition D:	10 GB
Domain NetBios Name:	Excellondon
Active directory recovery Password:	123456

### 2.1.2 ACTIVE DIRECTORY USERS

Account	Group	Password
Administrator	Domain Admin	London2011
Manager	Domain Admin	123456
Support	Domain Admin	123456
User01	Domain users	123456
...	...	....
User10	Domain users	123456

### 2.1.3 LINUX SERVER SPECIFICATIONS

Domain member:	excellondon.org
Hostname	Excellondonsrv2
root password:	London2011
Account:	user
Password	123456
IP address:	192.168.X0.3

### 2.1.4 NETWORK SPECIFICATIONS

Network Address	192.168.X0.0/24
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### 2.1.5 PRINTER SPECIFICATIONS

Connection	Directly connected to the laptop via USB
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### 2.1.6 NOTEBOOK SPECIFICATIONS

Computer name:	excellondonPC1
Domain member:	excellondon.org
IP address:	DHCP

### 2.1.7 HTML code

Index.html page :

```

<html>

<br><br><br><br>

Welcome on Excellondon.org Web Site

<br>

<br><br><br><br>

</html>

```

Personal page :

```
<html>
```

```
<br><br><br><br>
```

```
Welcome on the "user01 to user05" personal page
```

```
<br><br><br><br>
```

```
</html>
```

### 2.1.8 WLAN SPECIFICATIONS

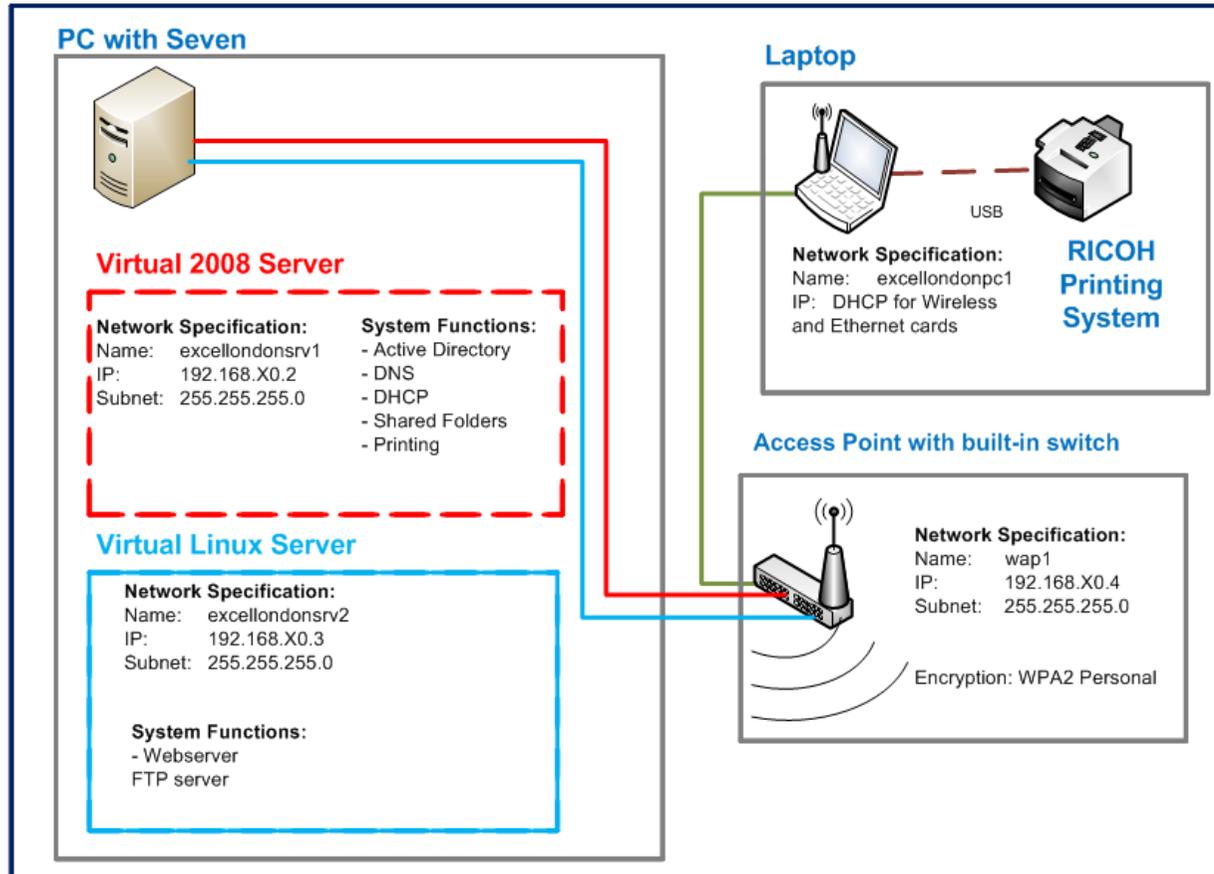
Encryption	WPA2 personal
SSID	WorkstationX0

## 2.1.9 NETWORK DIAGRAM

### Island 1 – small and home office appendix a



SOHO – 192.168.X0.0/24



## 2.2 INSTRUCTIONS

### 2.2.1 INSTRUCTIONS TO THE COMPETITOR

- Do not bring any materials with you to the competition.
- Mobile phones are not to be used.
- Do not disclose any competition material / information to any person during each day's competition.
- Read the whole competition script prior to you starting work.
- Be aware different tasks attract a percentage of the overall mark. Plan your time carefully.

### 2.2.2 EQUIPMENT, MACHINERY, INSTALLATIONS (PREINSTALLED) AND MATERIALS REQUIRED

#### PC

- PC - High Powered Desktop, 3 Nics, (500G HD, 8 G RAM, Quadcore
- OS (Windows Seven) preinstalled
- Login account: competitor, password : London2011

#### Notebook

- Notebook assembled with Seven preinstalled
- Login account: competitor, password: London2011

#### WIFI / Switch

- CISCO Linksys E2000, default IP is 192.168.1.1
- Username: admin
- Password: admin
- **You cannot change the username or the password**

#### Ricoh Printing System