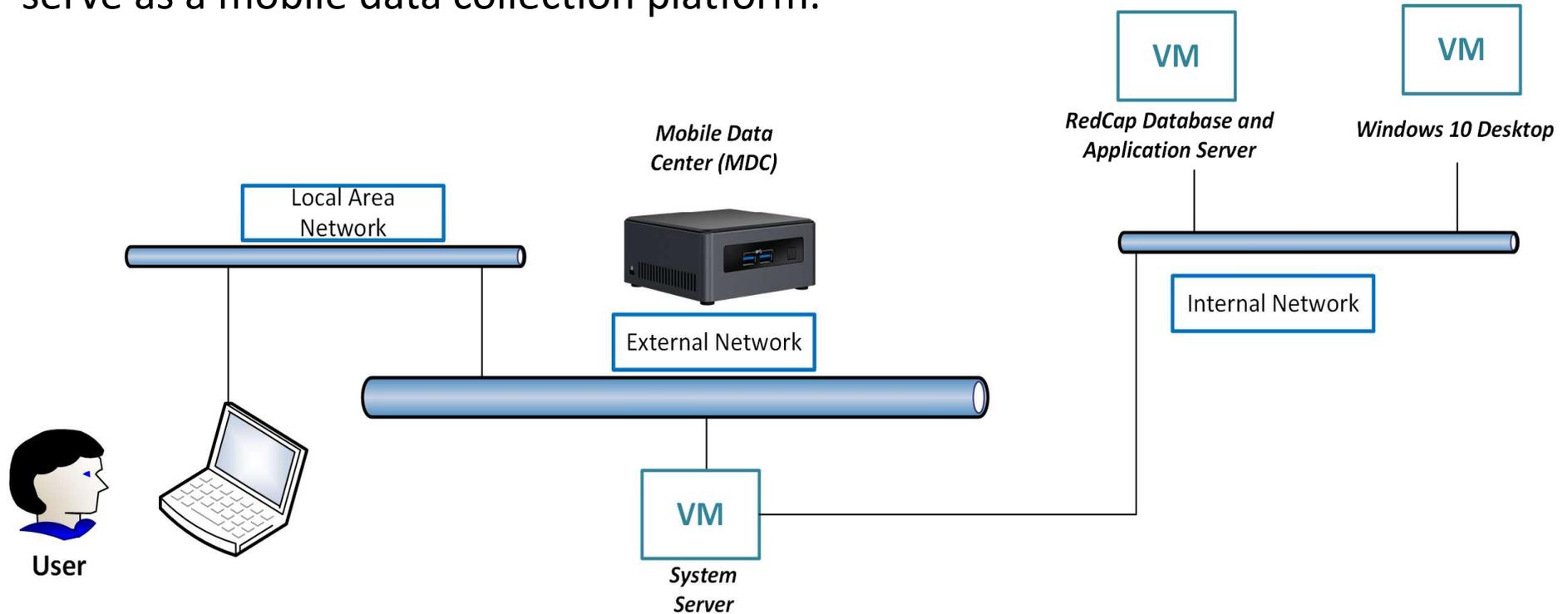# ADMINISTRATION OF MDC REDCAP SERVERS

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Learning Objectives

On successful completion of this module, you will:

- Learn what the Mobile Data Center (MDC) is composed of

- Find instructions on how to set up the MDC

Overview

The MDC is composed of various hardware and software components configured to serve as a mobile data collection platform.

Mobile Data Center (MDC)

Local Area Network

External Network

System Server

VM

VM

VM

RedCap Database and Application Server

Windows 10 Desktop

Internal Network

User

Outline

The following is a breakdown of the key components of the MDC platform

1 Hardware devices

2 Internal network configuration (virtual machines)

3 Local area network configuration (wireless router)

4 Wide area network configuration (internet)

1 Hardware devices

Intel NUC

Wireless router

Laptop

RJ45 Connectors

2 Internal network configuration (virtual machines)

Preconfigured Static IP addresses

➢ **192.168.0.254 (Intel NUC (MDC))**

  o Hypervisor (ESXi Virtualisation)

➢ **192.168.0.1 (System server)**

  o AD, Fileserver, Firewall

➢ **192.168.0.4 (RedCap server)**

  o Database and Application Server

➢ **192.168.0.8 (Windows 10 Desktop)**

  o Client PC

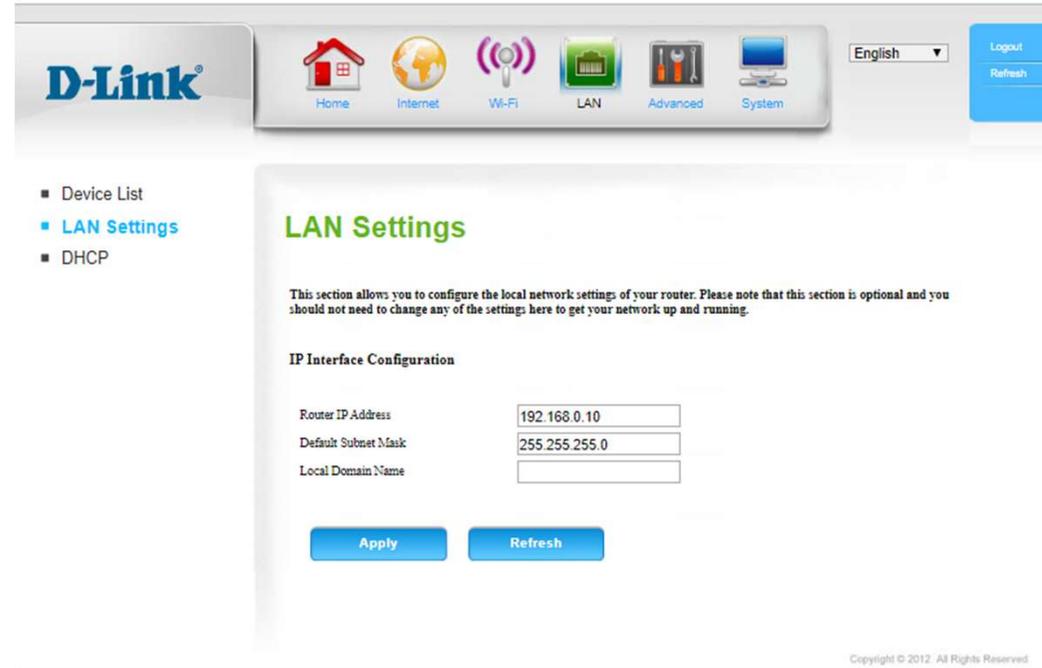## 3 Local area network configuration (wireless router)

Logging-in

➢ Open the router configuration page by opening a browser and typing
http://192.168.0.10

➢ Enter the correct credentials under the Username and Password fields and click the Login button

Local Area Network (LAN) Configuration

➢Click the LAN tab on top of the page followed by clicking the LAN Settings on the left

➢Set the Router IP Address to 192.168.0.10 and Default Subnet Mask to 225.225.225.0

➢Click the Apply button to save

DHCP setup

➢Navigate to the DHCP configuration page by clicking DHCP on the left of the page

➢Click the Enable DHCP Server checkbox. Enter 100 and 150 into the DHCP IP Address Range fields. Set the DHCP Lease Time to 86400 (default)

➢Click the Apply button to save

➢Set the Primary DNS IP Address to 8.8.8.8

➢Click the Apply button to save

4 Wide area network configuration (internet)

The router must be configured to provide internet connectivity to the MDC device. To configure the router, you can either use the sim card that is provided to each site, or connect using an existing LAN connection

Connecting to the internet

➤Go to this link and login http://192.168.0.10

➤Click the internet tab on the top of the page to access the WAN Service Configuration page

➤Configure depending on the type of internet connection available on site

➤Click Apply for the settings to take effect