System and Network Technologies

Module Code: COMP07068

SYSTEM BUILD ASSIGNMENT (REPEAT)

Deadline for Submission: 2pm Monday September 5th 2016

Project Brief

Part 1:
Build a Linux system using Oracle Virtual Box Hypervisor

Part 2:
Provide detailed documentation on the system built in part 1

Part 3:
Essay on Operating Systems

Part 1

Build a Linux system using Oracle Virtual Box

Linux Server Specification

Operating System: Your choice of Linux distribution (eg., Ubuntu)
Note: *Hard drive size should be no bigger than 4GB*
Configuration: *The server should have the following configuration:*

1. Apache Webserver installed and functioning, serving a simple webpage

2. The server must contain the following 2 accounts

    a) 1: Account called “admin” that has full read-write-execute access to the /var/www/html directory and can create, modify and delete files in this directory.

    b) 2: Account called “sysuser” that can view and read file in the /var/www/html directory but cannot edit files in this directory.

3. The server must also generate a daily email with details of the system including the following details:

    - Server Name
    - Size of RAM
    - IP Address
    - Server Uptime
      Above information can be in body text of email or as an attachment
    - *The email should also contain your name in the email subject line*
    - *Email configured to automatically send daily at 8am*

    Email should be sent to the following address: systecsubmission@gmail.com

Part 2

Provide documentation for system from Part 1 that includes the following:

- Document how the server was installed including screenshots of the build process. The documentation should have sufficient detail (with step-by-step instructions) to serve as an installation document for similar systems.

- Provide details on the specification of the Virtual Server including details such as RAM, hard disk size and IP addresses.

- Provide account information (usernames and passwords)

- Documentation of how emails are generated, including analysis of the code used to generate the email and how it is configured to send at a specific time. Include in this information on any testing performed that ensure email functionality functions as expected.

- Describe briefly how a similar result would be achieved in a windows environment. (Screenshots are not required, just an outline of the steps required).

Part 3 – Essay Question

Complete both parts below.

(i) Compare and contrast popular modern operating systems, including Linux, Windows, Android and OSX, and discuss the approaches these operating systems take in relation to user interface, security and reliability. (Max 800 words)

(ii) *"Using Linux as a desktop operating system is, at best, trying and difficult. Most Linux distributions are cumbersome, awkward and ill-conceived in relation to user-interface and usability. Linux has its place in computing, but it is not as a desktop operating system."*

Discuss the above comment, stating whether you agree or disagree, detailing why. (max 800 words)

Essay Specification

Document to be uploaded in moodle via a turnitin link on moodle
Closing date for upload is 2pm, Monday September 5th.

Note: If you are quoting from a resource then you must cite the resource using the Harvard Citation style.

Online citation generators at:
http://www.harvardgenerator.com
http://www.citationmachine.net/

Submission Guidelines

Deliverables are as follows:

Part 1: A copy of your Virtual Hard Disk file of your Linux server. When you are ready to submit, please export your machine as an OVA/OVF file for submission.
File will be accepted on pen drive (or portable drive), or provided via url (such as dropbox or google drive) that you will provide. Pen drives and portable drives will be returned.

Part 2: PDF or word document of Ubuntu Server configuration
To be submitted to a link in moodle

Part 3: PDF or word document
To be submitted to turnitin link in moodle

Final date of acceptance for above is 2pm on Monday September 5th

***Be aware when building your server of specifying a size for your virtual hard drive that you can upload or fit on a pen drive*. Size should not exceed 4GB.**