Assignment Name: Introduction to OpenLDAP

Duration : 2 weeks (Starting from July 27th , 2021 To 10th August)

Operation system: Ubuntu

Note: Completed assignments should be submitted via http://school.wso2.com.

Assignment answer file must be named as OpenLDAP.pdf

Create the document that includes steps that you followed to answer each question , Ultimately someone else should be able to refer to your answers as a guide to provide solutions to below questions / use cases .

Your step by step guide must include the followings as evidence

1. Share the Graphical view of the LDAP structure that you going to create
2. Share the LDIF file of the suffix and organizational units , that used to add them to the LDAP
3. Share the LDIF file of the users that used to add them to the LDAP server
4. Share the LDIF file of the books that used to add books to the LDAP server
5. Share the commands that you used to add users , books , suffix and organizational units to LDAP
6. Share the **/etc/ldap/ldap.conf** and **/etc/ldap/slapd.conf** configuration file of the master LDAP server
7. Share the **/etc/ldap/ldap.conf** and **/etc/ldap/slapd.conf** configuration file of the slave LDAP server

1. Create a OpenLDAP server to store employee information found in the shared excel sheet.***(Refer "Demo Employee Information" section of https://school.wso2.com and download the CSV file)*** Based on the provided employee information in the excel sheet come up with the appropriate LDAP tree structure. Suffix of the LDAP must be **dc=ltacademy,dc=com** (You can use the **InetOrgPerson** Objectclass to store user information)

    a. Make sure that every users password in LDAP must be stored in HASH format (SSHA or SHA)

b. Under the **dc=ltacademy,dc=com** create the Organizational Unit called **Books (ou=books)** and store the given book information (Check shared Excel sheet) unter it .

c. Make employee **email** and **mobile** attributes unique across LDAP tree structure (Use unique overlay)

d. Configure Audit Overlay so that administrator can track what are the changes happen to the LDAP server

e. Create an Organizational Unit called **Ou=System** . under the suffix and create a user called **replicationuser** (You guys can use **simpleSecurityObject** or **InetOrgPerson** ObjectClass when creating that user , but simpleSecurityObject is the better approach)

f. Grant user: **replicationuser** the read access to the entire LDAP tree structure

g. Setup a slave LDAP server ,so that it will replicate LDAP data from master in near real time . (Use the created **replicationuser** to read data from master)