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DAT151 – Oblig6

LDAP, Kerberos and Samba

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# Task 1: LDAP

This assignment will be done with my raspberry pi devices. ‘

## Installation

# Running the usual for installing

**sudo** apt-get update

**sudo** apt-get install slapd ldap-utils

# Asked for password. Giving it a long password.

PakkeoppseCC 
pi@AdrianDC ~ 
X n 01 password 
X Please the password for the admin entry in your I-DAP 

# Starting configuration

**sudo** dpkg-reconfigure slapd

PakkeoppseCC 
pi@AdrianDC ~ 
0m OpenLDAP conf 0n2 
for 
If you n bl h on 、 no n 1 conf on database W 11 be X 

PakkeoppseCC 
pi@AdrianDC ~ 
CICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICI_- 
directory. FOI X m91 
The DNS domain 0 h base DN Of h I-DAP 
DNS domain name 
•dc=fOO, dc—example, as base DN 
•fOO.example.OIg• W 11 the With 

PakkeoppseCC 
pi@AdrianDC ~ 
CICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICI_- 
I-DAP 
Please the name Of the 0 the base DN Of youI 

PakkeoppseCC 
pi@AdrianDC ~ 
The MDS backend recommended . MDS a new 01 and 
HOB and BOB us m 口 formats , but HOB adds 5u99 口 for 
Database backend 0 us … 
your needs . See /uSI/ShaIe/dOC/Slapd/REÄDME . Debian gz de a 15 
In any case , you should the n database for 
1 Chan BOB 01 HOB 
. Both 5u990H the me configuration 0n5 
BOB 

PakkeoppseCC 
pi@AdrianDC ~ 
CICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICI_- 
DO want Che database 0 be When 51 d? 

EakkeoppseCC 
CICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICICI_- 
Move 01d database? 
W 11 move the 01d database f 1E5 Of the way before creating a new 
There 11 f 1E5 in 、 Val 、 1 b 、 Id which W 11 probably bleak the 
configuration 9HOCE55 . If you enable h on , the SCI 
pißAdrianDC: 
囗 
二 

## Commands

# Assignment 1

# This assignemt will be configured on my Raspberry pi network. AdrianDC will be the domain controller (server) and AdrianPi will be the client.

# Installing a web user interface for ldap administration

**sudo** apt-get install phpldapadmin

# Checking the installation

ldapsearch -x **-**LLL **-**H ldap:/// -b dc**=**adrian**,**dc**=**local

dn**:** dc**=**adrian**,**dc**=**local

objectClass**:** top

objectClass**:** dcObject

objectClass**:** organization

o**:** adrian

dc**:** adrian

dn**:** cn**=**admin**,**dc**=**adrian**,**dc**=**local

objectClass**:** simpleSecurityObject

objectClass**:** organizationalRole

cn**:** admin

description**:** LDAP administrator

## Adding users and Organizational Units

**$ nano** makingou.ldif

dn**:** ou**=**people**,**dc**=**adrian**,**dc**=**local

objectClass**:** organizationalUnit

ou**:** people

**$ nano** addAdrian.ldif

#addAdrian.ldif

dn**:** uid**=**adrian**,**ou**=**people**,**dc**=**adrian**,**dc**=**local

objectClass**:** top

objectClass**:** account

objectClass**:** posixAccount

objectClass**:** shadowAccount

cn**:** adrian

uid**:** adrian

uidNumber**:** 16859

gidNumber**:** 100

homeDirectory**:** **/**home**/**adrian

loginShell**:** **/**bin**/**bash

gecos**:** adrian

userPassword**:** **{crypt}**x

shadowLastChange**:** 0

shadowMax**:** 0

shadowWarning**:** 0

#same was done for OU first.

**$ ldapadd** -x -W **-**D "cn=admin,dc=adrian,dc=local" -f addAdrian.ldif

Enter LDAP Password**:**

adding new entry "uid=adrian,ou=people,dc=adrian,dc=local"

#Setting a default password

**$ ldappasswd** -s passord123 -W **-**D "cn=admin,dc=adrian,dc=local" -x "uid=adrian,ou=people,dc=adrian,dc=local"

Enter LDAP Password**:**

Checking that the web interface shows what is expected after adding a OU and a user:

My LDAP Server O 
schema search refresh info import export logout 
as: cn=admin 
Logged in 
dc=adrian,dc=local (2) 
cn=admin 
ou=people (1) 
uid=adrian 
Create new entry here 
Create new entry here 

## Testing

#Client

#(all of this is ran on a client device)

**$ sudo** nano **/**etc**/**hostname #Changed into the domain

**$ sudo** nano **/**etc**/**nsswitch.conf #Checked that ldap was enabled

**$ sudo** pam-auth-update

**$ sudo** pam-auth-update

**$ sudo** service nslcd stop

**$ sudo** service nslcd start

**$ sudo** service nscd stop

**$ sudo** service nscd start

**$ su** **-** adrian

Passord**:**

Du må straks endre passordet ditt **(**ordre fra rot**)**

Nytt passord**:**

Bekreft nytt **-**passord**:**

Ingen hjemmemappe**,** logger inn med HOME**=/**

adrian**@**adrian**:/$**

#Now we have successfully logged in from a client computer with a ldap user

# Task 2: Kerberos

# kerberos server

**yum** install krb5-server krb5-workstation

**sudo** nano **/**etc**/**krb5.conf

**sudo** nano **/**var**/**kerberos**/**krb5kdc**/**kdc.conf

**sudo** kdb5\_util create -s

Loading random data

Initializing database '/var/kerberos/krb5kdc/principal' for realm 'EXAMPLE.COM'**,**

master key name 'K/M@EXAMPLE.COM'

You will be prompted for the database Master Password.

It is important that you NOT FORGET this password.

Enter KDC database master key**:**

Re-enter KDC database master key to verify**:**

**sudo** systemctl enable kadmin krb5kdc

**sudo** systemctl start kadmin krb5kdc

**sudo** firewall-cmd **--**permanent **--**add-service**=**kerberos

**sudo** firewall-cmd **--**reload

# Made a user

**su** user

kinit

# Got the ticket.

# Task 3: SAMBA

## Installation

**sudo** apt-get install samba samba-common-bin

**sudo** mkdir **-**m 1777 **/**winShare

**sudo** nano **/**etc**/**samba**/**smb.conf

**[**share**]**

Comment **=** Pi shared folder

Path **=** **/**winShare

Browseable **=** yes

Writeable **=** Yes

only guest **=** no

create mask **=** 0777

directory mask **=** 0777

Public **=** yes

Guest ok **=** yes

## Testing

til 
nettverks lasseri 
Angi stedet for ditt webområde 
Skriv inn adressen til webområdet, FTP-området eller nettverksplasseringen som denne snarveien 
skal åpne. 
Internett- eller nettverksadresse: 
Vis eksempler 
81a gjennom... 
Av b nyt 

v Nettverksplasseringer (1) 
adrianDCFiI 

Adding a file «Tester.txt» in windows

**/** **$ cd** **/**winShare**/**

**/**winShare **$ ls** **-**al

totalt 8

drwxrwxrwt 2 root root 4096 feb. 21 18**:**15 **.**

drwxr-xr-x 22 root root 4096 feb. 21 18**:**02 **..**

**-**rwxrw-rw- 1 pi pi 0 feb. 21 18**:**15 Tester.txt

Adding a file «Fungerer.txt» on server

**$ touch** fungerer.txt

enne PCen adrianDCFiI 
Tester.txt 
fungerer.txt 
Endringsdato 
21.02.2020 18:15 
21.02.2020 18:20 
Type 
Tekstdokument 
Tekstdokument 