Step 1: Add User on LDAP server and principles in kerberos

```
[root@ip-172-31-42-187 ~] # rpm -qa | grep openldap*
 penldap-clients-2.4.40-13.e17.x86 64
penldap-2.4.40-13.e17.x86 64
penldap-servers-2.4.40-13.e17.x86 64
[root@ip-172-31-42-187 ~] # useradd newman
[root@ip-172-31-42-187 ~]# passwd newman
Changing password for user newman.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@ip-172-31-42-187 ~] # kadmin.local
Authenticating as principal root/admin@EXAMPLE.COM with password.
kadmin.local: addprinc newman
WARNING: no policy specified for newman@EXAMPLE.COM; defaulting to no policy
Enter password for principal "newman@EXAMPLE.COM":
Re-enter password for principal "newman@EXAMPLE.COM":
Principal "newman@EXAMPLE.COM" created.
```

Step 2: check created Principle

```
kadmin.local: list principals
HTTP/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
HTTP/ip-172-31-44-158.ec2.internal@EXAMPLE.COM
K/M@EXAMPLE.COM
ambari-qa-testing_rs@EXAMPLE.COM
ambari-server-testing_rs@EXAMPLE.COM
amshbase/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
amszk/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
ashnee@EXAMPLE.COM
demolo@EXAMPLE.COM
dn/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
dn/ip-172-31-44-158.ec2.internal@EXAMPLE.COM
hbase-testing rs@EXAMPLE.COM
hbase/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
hbase/ip-172-31-44-158.ec2.internal@EXAMPLE.COM
hdfs-testing rs@EXAMPLE.COM
hitman@EXAMPLE.COM
hive/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
hive/ip-172-31-44-158.ec2.internal@EXAMPLE.COM
host/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
jhs/ip-172-31-44-158.ec2.internal@EXAMPLE.COM
kadmin/admin@EXAMPLE.COM
kadmin/changepw@EXAMPLE.COM
kadmin/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
kiprop/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
knox/ip-172-31-42-187.ec2.internal@EXAMPLE.COM
krbtgt/EXAMPLE.COM@EXAMPLE.COM
newman@EXAMPLE.COM
```

Step 3: add keytab for newuser in kerberos

```
kadmin.local: exit
[root@ip-172-31-42-187 mykeytab] # kadmin.local
Authenticating as principal root/admin@EXAMPLE.COM with password.
kadmin.local: ktadd -k newman -norandkey newman@EXAMPLE.COM
Entry for principal newman@EXAMPLE.COM with kvno 1, encryption type aes256-cts-hmac-sha1-96 added to keytab WRFILE:newman.
Entry for principal newman@EXAMPLE.COM with kvno 1, encryption type aes128-cts-hmac-sha1-96 added to keytab WRFILE:newman.
Entry for principal newman@EXAMPLE.COM with kvno 1, encryption type des3-cbc-shal added to keytab WRFILE:newman.
Entry for principal newman@EXAMPLE.COM with kvno 1, encryption type arcfour-hmac added to keytab WRFILE:newman.
Entry for principal newman@EXAMPLE.COM with kvno 1, encryption type camellia256-cts-cmac added to keytab WRFILE:newman.
Entry for principal newman@EXAMPLE.COM with kvno 1, encryption type camellia128-cts-cmac added to keytab WRFILE:newman.
Entry for principal newman@EXAMPLE.COM with kvno 1, encryption type des-hmac-shal added to keytab WRFILE:newman.
Entry for principal newman@EXAMPLE.COM with kvno 1, encryption type des-cbc-md5 added to keytab WRFILE:newman.
kadmin.local: exit
[root@ip-172-31-42-187 mykeytab]# ktutil
ktutil: read kt /var/kerberos/mykeytab/newman
ktutil: list
slot KVNO Principal
                              newman@EXAMPLE.COM
                              newman@EXAMPLE.COM
                              newman@EXAMPLE.COM
                              newman@EXAMPLE.COM
                              newman@EXAMPLE.COM
                              newman@EXAMPLE.COM
                              newman@EXAMPLE.COM
                              newman@EXAMPLE.COM
ktutil: exit
[root@ip-172-31-42-187 mykeytab]# |
```

Step 4: go cd /usr/share/migrationtools for adding entry of newman user in Idap

```
[root@ip-172-31-42-187 migrationtools]# 11
total 144
-rw-r--r-- 1 root root
                              15 Jun 14 05:39 group
-rw-r--r-- 1 root root 133 Jun 14 05:45 groups.ldif
-rwxr-xr-x 1 root root 2652 Dec 28 2013 migrate_aliases.pl
-rwxr-xr-x 1 root root 2950 Dec 28 2013 migrate_all_netinfo_offline.sh
-rwxr-xr-x 1 root root 2946 Dec 28 2013 migrate all netinfo online.sh
-rwxr-xr-x 1 root root 3011 Dec 28 2013 migrate_all_nis_offline.sh
-rwxr-xr-x 1 root root 3006 Dec 28 2013 migrate_all_nis_online.sh
-rwxr-xr-x 1 root root 3164 Dec 28 2013 migrate_all_nisplus_offline.sh
-rwxr-xr-x 1 root root 3146 Dec 28 2013 migrate all nisplus online.sh
-rwxr-xr-x 1 root root 5267 Dec 28 2013 migrate all offline.sh
-rwxr-xr-x 1 root root 7468 Dec 28 2013 migrate_all_online.sh
-rwxr-xr-x 1 root root 3278 Dec 28 2013 migrate automount.pl
-rwxr-xr-x 1 root root 2608 Dec 28 2013 migrate_base.pl
-rw-r--r-- 1 root root 8886 Jun 9 03:50 migrate_common.ph
-rwxr-xr-x 1 root root 2952 Dec 28 2013 migrate_fstab.pl
-rwxr-xr-x 1 root root 2714 Dec 28 2013 migrate group.pl
-rwxr-xr-x 1 root root 3087 Dec 28 2013 migrate_hosts.pl
-rwxr-xr-x 1 root root 2856 Dec 28 2013 migrate netgroup byhost.pl
-rwxr-xr-x 1 root root 2856 Dec 28 2013 migrate netgroup byuser.pl
 rwxr-xr-x 1 root root 3879 Dec 28 2013 migrate_netgroup.pl
-rwxr-xr-x 1 root root 2840 Dec 28 2013 migrate_networks.pl
-rwxr-xr-x 1 root root
                             5635 Dec 28
                                              2013 migrate passwd.pl
-rwxr-xr-x 1 root root 2428 Dec 28 2013 migrate profile.pl
-rwxr-xr-x 1 root root 2873 Dec 28 2013 migrate_protocols.pl
-rwxr-xr-x 1 root root 2854 Dec 28 2013 migrate_rpc.pl
-rwxr-xr-x 1 root root 11465 Dec 28 2013 migrate_services.pl
-rwxr-xr-x 1 root root 3419 Dec 28 2013 migrate slapd conf.pl
                               43 Jun 14 05:38 passwd
-rw-r--r-- 1 root root
                              527 Jun 14 05:39 users.ldif
-rw-r--r-- 1 root root
[root@ip-172-31-42-187 migrationtools]# rm -rvf passwd group
removed âpasswdâ
removed âgroupâ
[root@ip-172-31-42-187 migrationtools]#
```

Step 5: add entry of user and group in passwd and group

Step 6: Now try to connect with newman user and check klist and home directory

```
Connection to t1 closed.
[root@ip-172-31-42-187 ~] # ssh newman@t2
newman@t2's password:
Could not chdir to home directory /home/newman: No such file or directory
-bash-4.2$ klist
Ticket cache: FILE:/tmp/krb5cc_1026
Default principal: newman@EXAMPLE.COM
Valid starting
                                                    Expires
                                                                                                          Service principal
06/14/2017 07:41:11 06/15/2017 07:41:11 krbtgt/EXAMPLE.COM@EXAMPLE.COM
                    renew until 06/21/2017 07:41:11
 -bash-4.2$ exit
 logout
 Connection to t2 closed.
 [root@ip-172-31-42-187 ~] # cd /home
[root@ip-172-31-42-187 home]# 11
 total 12

      drwx-----
      4 ambari-qa hadoop
      103 Jun 12 06:44 ambari-qa

      drwx-----
      3 ams
      hadoop
      87 Jun 12 06:39 ams

      drw-r----
      2 ashnee
      ashnee
      83 Jun 9 08:14 ashnee

      drwx------
      2 demolo
      83 Jun 14 05:37 demolo

drwx----. 3 ec2-user ec2-user 95 Jun 9 02:00 ec2-user
-rw-r--r-- 1 root root 175 Jun 9 08:01 group
-rw-r--r-- 1 root root 15 Jun 9 08:13 groups
drwxr-xr-x 5 root root 60 Jun 9 07:47 guests

      drwxr-xr-x
      5 root
      root
      60 Jun 9 07:47 guests

      drwx-----
      3 hbase
      hadoop
      87 Jun 12 06:36 hbase

      drwx-----
      2 hcat
      hadoop
      62 Jun 12 06:24 hcat

      drwx-----
      5 hdfs
      hadoop
      156 Jun 14 02:39 hdfs

      drwx-----
      2 hitman
      hitman
      83 Jun 14 03:20 hitman

      drwx-----
      3 hive
      hadoop
      145 Jun 13 03:09 hive

      drwx-----
      3 knox
      hadoop
      87 Jun 12 06:36 knox

                                                                                    83 Jun 14 03:20 hitman

      drwx-----
      2 mapred
      hadoop
      62 Jun 12 06:24 mapred

      drwx-----
      2 newman
      newman
      83 Jun 14 07:40 newman

      -rw-r---
      1 root
      root
      43 Jun 9 08:11 passwd

      drwx-----
      4 rahul
      rahul
      124 Jun 13 04:17 rahul

drwx----- 2 ranger hadoop 62 Jun 12 07:37 ranger
drwx----- 2 saif saif 83 Jun 14 02:40 saif

      drwx-----
      2 saif
      saif
      83 Jun 14 02:40 saif

      drwx-----
      3 shehbaz
      shehbaz
      108 Jun 12 09:26 shehbaz

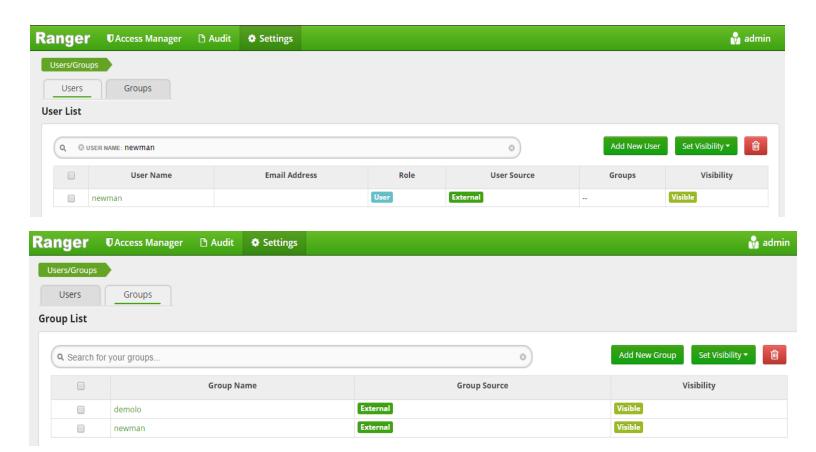
      drwx-----
      3 spark
      hadoop
      87 Jun 12 06:37 spark

      drwx------
      2 t3
      t3
      83 Jun 12 05:32 t3

      drwx------
      2 tez
      hadoop
      62 Jun 12 06:24 tez

drwx----- 2 tez hadoop 62 Jun 12 06:24 tez
drwx----- 3 yarn hadoop 108 Jun 13 03:09 yarn
drwx----- 3 zookeeper hadoop 87 Jun 12 06:36 zooke
                                                                                  87 Jun 12 06:36 zookeeper
[root@ip-172-31-42-187 home]#
```

Step 7: go to ambari ui and check for user and group sink in ranger



```
# rpm -qa | grep openIdap*
# useradd newman
# passwd newman
# kadmin.local
       Kadmin.local: Addprinc newman
       Kadmin.local: list_principals
       Kadmin.local: exit
# cd /var/Kerberos/mykeytab
# kadmin.local
       Kadmin.local: ktadd -k newman -norandkey newman@EXAMPLE.COM
       Kadmin.local: read_kt /var/Kerberos/myketab/newman
       Kadmin.local: list
       Kadmin.local: exit
# cd /usr/share/migrationtools
# II
#rm -rvf passwd group
tail -n1 /etc/passwd >> passwd
cat passwd
./migrate_passwd.pl passwd users.ldif
ldapadd -x -w redhat -D cn=Manager,dc=example,dc=com -f users.ldif
tail -n1 /etc/group >> group
./migrate_group.pl group groups.ldif
Idapadd -x -w redhat -D cn=Manager,dc=example,dc=com -f groups.ldif
cd
```