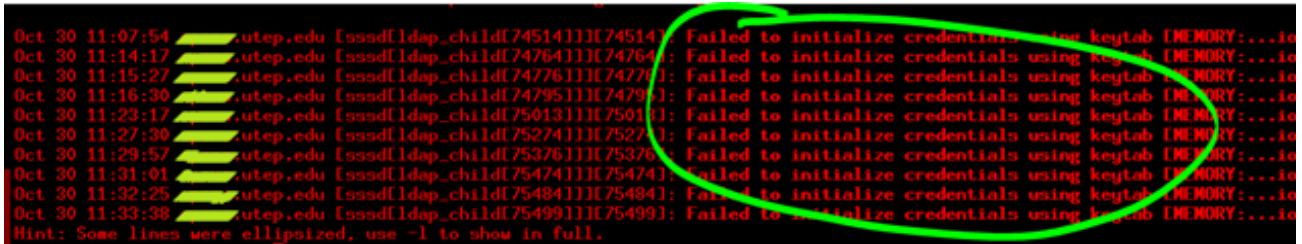


UTEP Authentication Lost on Linux client

- 1) SSH with an account that has access to login to the Linux machine.
- 2) # `systemctl status sssd`



```
Oct 30 11:07:54 utep.edu [sssd[ldap_child(745141)]](745141): Failed to initialize credentials using keytab [MEMORY:...ie
Oct 30 11:14:17 utep.edu [sssd[ldap_child(747641)]](747641): Failed to initialize credentials using keytab [MEMORY:...ie
Oct 30 11:15:27 utep.edu [sssd[ldap_child(747761)]](747761): Failed to initialize credentials using keytab [MEMORY:...ie
Oct 30 11:16:30 utep.edu [sssd[ldap_child(747951)]](747951): Failed to initialize credentials using keytab [MEMORY:...ie
Oct 30 11:23:17 utep.edu [sssd[ldap_child(750131)]](750131): Failed to initialize credentials using keytab [MEMORY:...ie
Oct 30 11:27:30 utep.edu [sssd[ldap_child(752741)]](752741): Failed to initialize credentials using keytab [MEMORY:...ie
Oct 30 11:29:57 utep.edu [sssd[ldap_child(753761)]](753761): Failed to initialize credentials using keytab [MEMORY:...ie
Oct 30 11:31:01 utep.edu [sssd[ldap_child(754741)]](754741): Failed to initialize credentials using keytab [MEMORY:...ie
Oct 30 11:32:25 utep.edu [sssd[ldap_child(754841)]](754841): Failed to initialize credentials using keytab [MEMORY:...ie
Oct 30 11:33:38 utep.edu [sssd[ldap_child(754991)]](754991): Failed to initialize credentials using keytab [MEMORY:...ie
Hint: Some lines were ellipsized, use -l to show in full.
```

Figure 1- Authentication Lost to Windows Domain

- 3) # `sudo su -`
 - a. # `mount lus:/lus/repos /mnt`
- 4) # Backup the running `sssd.conf` (**BEFORE YOU LEAVE THE AD**)
 - a. # `cd /etc/sss`
 - b. # `cp sssd.conf sssd.conf_XXX`
- 5) Leave the Miners Domains
 - a. # `realm leave` (**IT WILL DESTROY the running `sssd.conf`**)
- 6) Joining to the Miner domain.
 - a. If running CentOS 7.x or higher, using the automatic process:
 - i. Check the `/etc/sss/sss.conf_UTEP` exists first.
 1. # `diff /etc/sss/sss.conf /mnt/sss.conf7_v2`
 2. If source in `/mnt` is newer replace the Base configuration
 - a. # `cp /mnt/sss7.conf_v2 /etc/sss/sss.conf_UTEP`**NOTE: If there is a department configuration it must be manually update using the `sss.conf_UTEP` as their configuration with their security groups.**
 - ii. # `/mnt/realm-setup.sh`
 1. Choose the department that this machines belongs to.
 2. You will be prompted to use your miners credentials to join UTEP.EDU
 3. If successful, the script will exit gracefully.
 - iii. # `umount /mnt`
 - iv. Skip to step 7
 - b. If running CentOS 7.x or higher, manual process:
 - i. Check the `/etc/sss/sss.conf_UTEP` exists first.
 1. # `cp /mnt/sss7.conf_v2 /etc/sss/sss.conf_UTEP`
 - ii. Replace the username with an actual UTEP account.
 1. # `realm join --user=username@utep.edu utep.edu`
 - iii. If successful, the command will exit gracefully.
 - iv. # `umount /mnt`

- v. You must connect to a system where you have the Admin tools installed to manage UTEP.EDU, and create the Linux OU based on the type of equipment joined.
 1. Open the AD Users and Computers, search for your computer and make sure that your server is locate on the following OU:

Servers only:

- Utep.edu\Information Resource & Planning\Research Academic Data Center\Colleges*Your-College**Your-Department*\Linux.

Workstations only:

- Utep.edu\Academic Affairs\Colleges*Your-College**Your-Department*\Linux.

- 7) Replace the generic UTEP.EDU configuration with department configuration. The only difference between the files should be the security groups.
 - a. `# cp sssd.conf_XXX sssd.conf`
 - b. `# systemctl restart sssd`
- 8) Check that the service is working and that is binding to UTEP.EDU
 - a. `# systemctl status sssd`

```

[Root@ ~]# systemctl status sssd
sssd.service - System Security Services Daemon
  Loaded: loaded (/usr/lib/systemd/system/sss.service; enabled; vendor preset: disabled)
  Active: active (running) since Wed 2019-10-30 11:50:38 MDT; 1min 51s ago
  Main PID: 76465 (sss)
  Tasks: 4
  CGroup: /system.slice/sss.service
          └─76465 /usr/sbin/sss -i --logger=files
             └─76469 /usr/libexec/sss/sss_be --domain utep.edu --uid 0 --gid 0 --logger=files
                └─76471 /usr/libexec/sss/sss_nss --uid 0 --gid 0 --logger=files
                   └─76472 /usr/libexec/sss/sss_pam --uid 0 --gid 0 --logger=files

Oct 30 11:50:38 utep.edu systemd[1]: Starting System Security Services Daemon...
Oct 30 11:50:38 utep.edu sssd[76465]: Starting up
Oct 30 11:50:38 utep.edu sssd[be[76469]: Starting up
Oct 30 11:50:38 utep.edu sssd[nss[76471]: Starting up
Oct 30 11:50:38 utep.edu sssd[pam[76472]: Starting up
Oct 30 11:50:38 utep.edu sssd_be[76469]: GSSAPI client step 1
Oct 30 11:50:38 utep.edu sssd_be[76469]: GSSAPI client step 1
Oct 30 11:50:38 utep.edu sssd_be[76469]: GSSAPI client step 1
Oct 30 11:50:38 utep.edu sssd_be[76469]: GSSAPI client step 2
Oct 30 11:50:38 utep.edu systemd[1]: Started System Security Services Daemon.

```

Figure 2- System is handshake with Domain is good.

```

[Root@ ~]# systemctl restart sssd
[Root@ ~]# systemctl status sssd
sssd.service - System Security Services Daemon
  Loaded: loaded (/usr/lib/systemd/system/sss.service; enabled; vendor preset: disabled)
  Active: active (running) since Wed 2019-10-30 12:06:35 MDT; 6s ago
  Main PID: 61012 (sss)
  Tasks: 4
  CGroup: /system.slice/sss.service
          └─61012 /usr/sbin/sss -i --logger=files
             └─61013 /usr/libexec/sss/sss_be --domain utep.edu --uid 0 --gid 0 --logger=files
                └─61014 /usr/libexec/sss/sss_nss --uid 0 --gid 0 --logger=files
                   └─61015 /usr/libexec/sss/sss_pam --uid 0 --gid 0 --logger=files

Oct 30 12:06:35 utep.edu sssd[61012]: ; TSIG error with server: tsig verify failure
Oct 30 12:06:35 utep.edu sssd[61012]: update failed: REFUSED
Oct 30 12:06:35 utep.edu sssd[61012]: ; TSIG error with server: tsig verify failure
Oct 30 12:06:35 utep.edu sssd[61012]: update failed: REFUSED
Oct 30 12:06:35 utep.edu sssd[61012]: ; TSIG error with server: tsig verify failure
Oct 30 12:06:35 utep.edu sssd[61012]: update failed: REFUSED
Oct 30 12:06:35 utep.edu sssd[61012]: ; TSIG error with server: tsig verify failure
Oct 30 12:06:35 utep.edu sssd[61012]: update failed: REFUSED
Oct 30 12:06:35 utep.edu sssd[61012]: ; TSIG error with server: tsig verify failure
Oct 30 12:06:35 utep.edu sssd[61012]: update failed: REFUSED

```

Figure 3 - DNS registration failed, this is due because is already register.

- 9) Test with an account that has never login



- a. # `realm list -all` (You should see your security groups)
- b. # `id username` (It should pull information from AD)

10) All done

