

Experiment 1.2: Start and Stop IBM SDS instances

Aim: To understand and demonstrate the process of starting and stopping IBM SDS (Security Directory Server) instances using command-line operations to manage LDAP services effectively.

Objective:

- Learn how to start and stop SDS instances (idsldap1 and idsldap2) using the ibmslapd command.
- Understand how to verify the successful startup and shutdown of the instances.
- Practice managing multiple SDS instances to ensure proper functioning of directory services in a secure environment.

Steps:

Step1 : Open Terminal from Desktop.

Step2 : Start the newly created SDS instance idsldap1 using below command:

`/opt/ibm/ldap/V6.4/sbin/ibmslapd -l idsldap1 -n -t.`

Note: Here in the command -l is instance name -n is to start -t to tail log

```
File Edit View Search Terminal Help
[root@isim ~]# /opt/ibm/ldap/V6.4/sbin/ibmslapd -l idsldap1 -n -t
GLPWRP123I The program '/opt/ibm/ldap/V6.4/sbin/64/ibmslapd' is used with the following arguments '-l idsldap1 -n -t'.
GLPSRV041I Server starting.
GLPSRV236W Premium feature activation code could not be loaded. Some features are not available.
GLPCTL113I Largest core file size creation limit for the process (in bytes): '0'(Soft limit) and '-1'(Hard limit).
GLPCTL119I Maximum Data Segment(Kbytes) soft ulimit for the process is -1 and the prescribed minimum is 262144.
GLPCTL119I Maximum File Size(512 bytes block) soft ulimit for the process is -1 and the prescribed minimum is 2097152.
GLPCTL122I Maximum Open Files soft ulimit for the process is 1024 and the prescribed minimum is 500.
GLPCTL121I Maximum Stack Size(Kbytes) soft ulimit for the process was 8192 and it is modified to the prescribed minimum 10240.
GLPCTL119I Maximum Virtual Memory(Kbytes) soft ulimit for the process is -1 and the prescribed minimum is 1048576.
GLPCOM024I The extended Operation plugin is successfully loaded from libevent.so.
GLPCOM024I The extended Operation plugin is successfully loaded from libtranext.so.
GLPCOM024I The extended Operation plugin is successfully loaded from libldaprepl.so.
```

You can see the server is started.

Step3: To start the idsldap2 instance, use the command:

`/opt/ibm/ldap/V6.4/sbin/ibmslapd -l idsldap2 -n -t.`

Note: Here in the command -l is instance name -n is to start -t to tail log.

```

File Edit View Search Terminal Help
[root@isim ~]# /opt/ibm/ldap/V6.4/sbin/ibmslapd -I idsldap2 -n -t
GLPWRP123I The program '/opt/ibm/ldap/V6.4/sbin/64/ibmslapd' is used with the following arguments '-I idsldap2 -n -t'.
GLPSRV041I Server starting.
GLPSRV236W Premium feature activation code could not be loaded. Some features are not available.
GLPCTL113I Largest core file size creation limit for the process (in bytes): '0'(Soft limit) and '1'(Hard limit).
GLPCTL119I Maximum Data Segment(Kbytes) soft ulimit for the process is -1 and the prescribed minimum is 262144.
GLPCTL119I Maximum File Size(512 bytes block) soft ulimit for the process is -1 and the prescribed minimum is 2097152.
GLPCTL122I Maximum Open Files soft ulimit for the process is 1024 and the prescribed minimum is 500.
GLPCTL121I Maximum Stack Size(Kbytes) soft ulimit for the process was 8192 and it is modified to the prescribed minimum 10240.
GLPCTL119I Maximum Virtual Memory(Kbytes) soft ulimit for the process is -1 and the prescribed minimum is 1048576.
GLPCOM024I The extended Operation plugin is successfully loaded from libevent.so.
GLPCOM024I The extended Operation plugin is successfully loaded from libtranext.so.
GLPCOM024I The extended Operation plugin is successfully loaded from libldaprepl.so.

```

You can see the server is started.

Step4: To stop the idsldap1 instance, use the command `/opt/ibm/ldap/V6.4/sbin/ibmslapd -l idsldap1 -k`. This command sends a signal to gracefully shut down the idsldap1 directory server instance, ensuring that it stops properly without disrupting other services.

```

[root@isim ~]# /opt/ibm/ldap/V6.4/sbin/ibmslapd -l idsldap1 -k
GLPWRP123I The program '/opt/ibm/ldap/V6.4/sbin/64/ibmslapd' is used with the following arguments '-l idsldap1 -k'.
GLPSRV124I The directory server instance 'idsldap1' is already stopped.
[root@isim ~]#

```

Step5 : To stop the idsldap2 instance, use the command `/opt/ibm/ldap/V6.4/sbin/ibmslapd -l idsldap2 -k`. This sends a stop signal to the idsldap2 server, gracefully shutting it down while ensuring all processes are properly terminated.

```

[root@isim ~]# /opt/ibm/ldap/V6.4/sbin/ibmslapd -l idsldap2 -k
GLPWRP123I The program '/opt/ibm/ldap/V6.4/sbin/64/ibmslapd' is used with the following arguments '-l idsldap2 -k'.
GLPSRV124I The directory server instance 'idsldap2' is already stopped.
[root@isim ~]#

```

Note : Start and Stop SDS instances using above commands for all the exercises below.

Learning Outcomes :

- Understand IBM SDS architecture and functionality.
- Gain command-line proficiency for starting/stopping instances.
- Learn how to manage IBM SDS instances (start, stop, restart).
- Develop troubleshooting skills for instance management.
- Build foundational knowledge in IBM LDAP server administration.
- Familiarize with automating instance start/stop processes.