



# IBM Tivoli Netcool Impact Administration and Implementation

## Course Corrections Document

April 27, 2021

TN045G (Classroom)

### About this document

This document contains information about issues that were encountered during deliveries of this course. These issues will be addressed in subsequent updates of the material.

You should review this document before the start of class, and use this list as the first point of reference if issues arise.



## LDAP self-signed SSL certificate fix

### Symptoms

- No users except smadmin can log into DASH.
- The following messages are in /home/dsrdbm01/idsslapd-dsrdbm01/logs/ibmslapd.log (on the VM hosting the LDAP server):

```
GLPSSL019E The SSL layer has reported an unidentified internal error, SSL extended error code:10.  
GLPSRV004I Terminating server.
```
- The IBM LDAP server starts in configuration-only mode.
- The IBM LDAP administration server cannot start.

### Cause

The SSL certificate that allows secure communication between LDAP and WebSphere Application Server is expired.

The password for the LDAP keystore database is also expired, although this is not directly pertinent.

### Solution

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**Important:** This document uses `host1.tivoli.edu` as an example host name. Use the actual host name in your environment where the LDAP server is running when you apply this fix.

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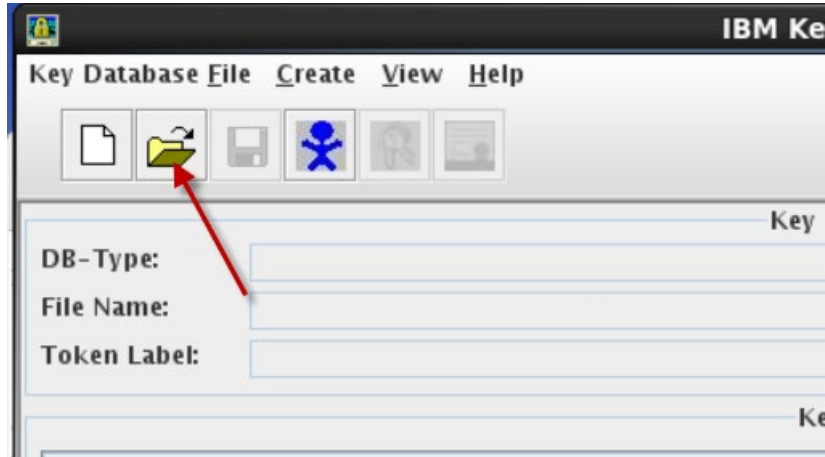
Run the following steps on `host1.tivoli.edu` to recreate the SSL certificate.

1. Start the key management tool.
  - a. Open a terminal window on `host1.tivoli.edu`.
  - b. Run the following command to switch to the root user. The password is **object00**.

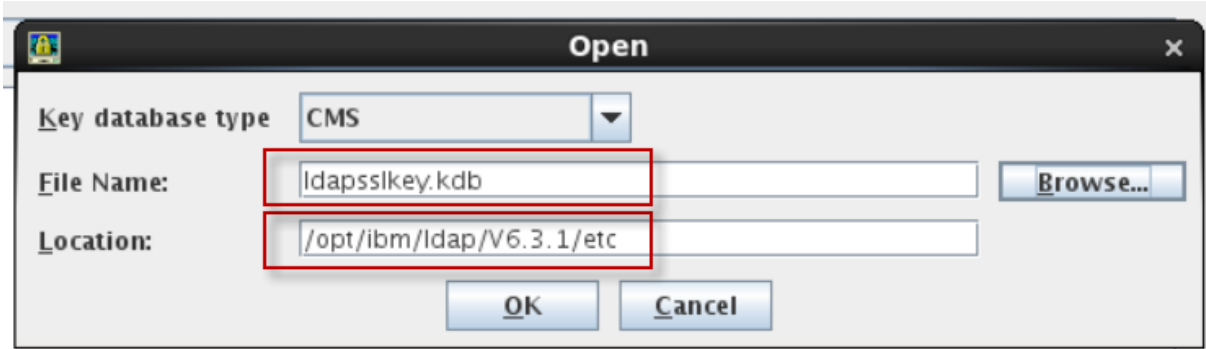
```
su - root  
Password: object00
```
  - c. Run the following commands to start the Key Management tool.

```
cd /opt/ibm/ldap/V6.3.1/appsrv/bin/  
  
./ikeyman.sh
```

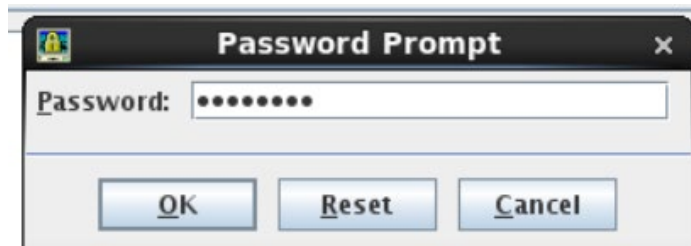
- 2. Recreate the SSL certificate.
  - a. Click the **Open** icon.



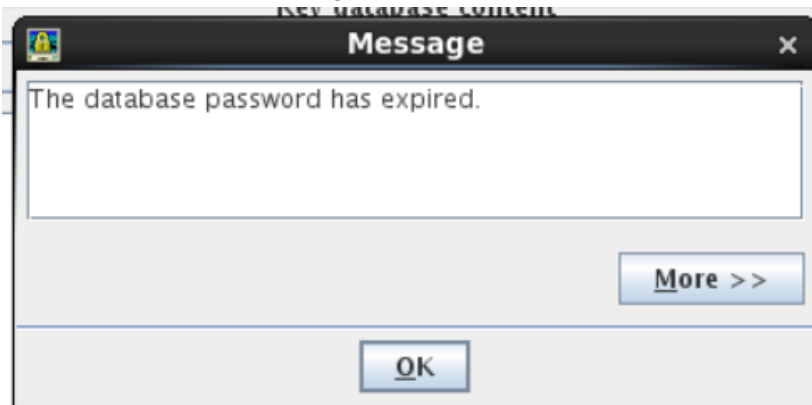
- b. Open the **ldapsslkey.kdb** database. This database is in the **/opt/ibm/ldap/V6.3.1/etc/** directory.



- c. Enter **object00** as the password.



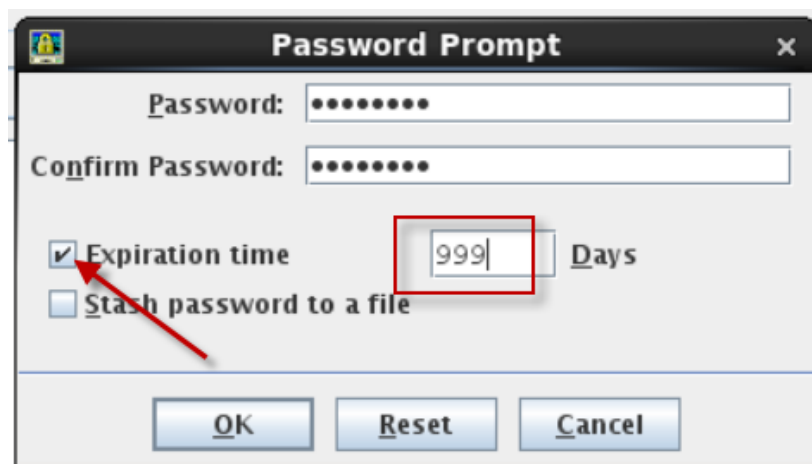
- d. Click **OK** on the password expired message.



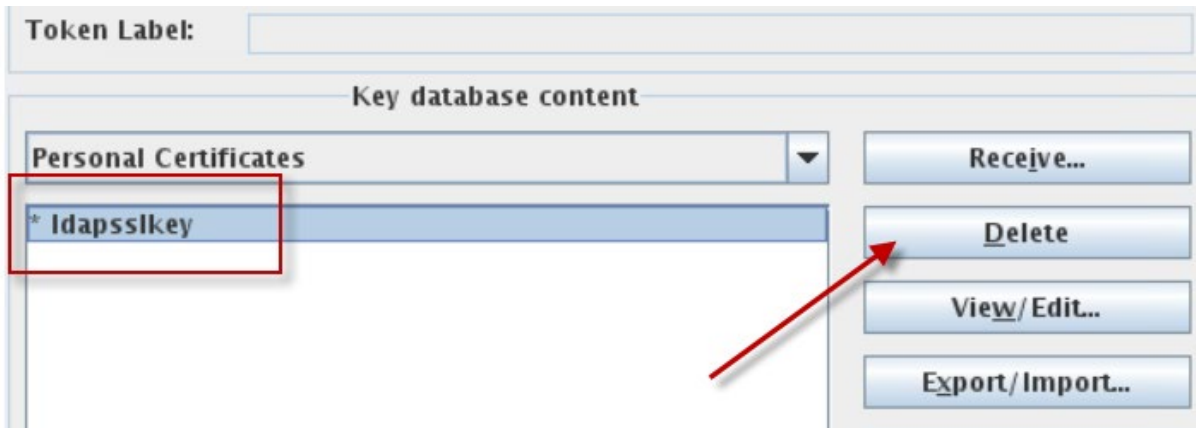
- e. Click **Yes** to change the password.



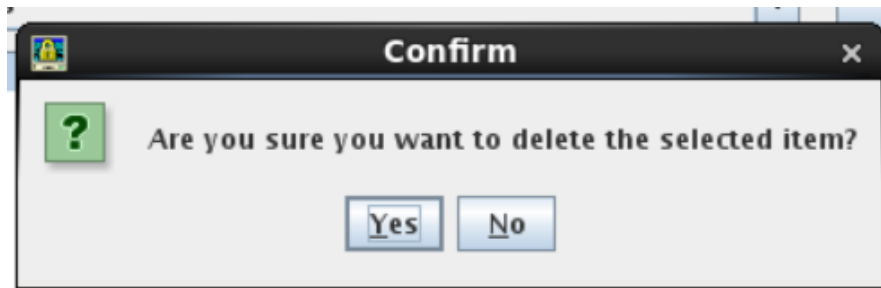
- f. Enter **object00** as the password.
- g. Enter **object00** again to confirm.
- h. Select **Expiration time**.
- i. Enter **999** as the expiration time.
- j. Click **OK**.



- k. Select the **Idapsslkey** certificate.
- l. Click **Delete**.



- m. Click **Yes** to confirm.



- n. Click **New Self-Signed**.



- o. Enter **ldapsslkey** as the **Key Label**.
- p. Enter your host name as the **Common Name**, if it is not already present.
- q. Enter **999** as the **Validity Period**.
- r. Click **OK**.

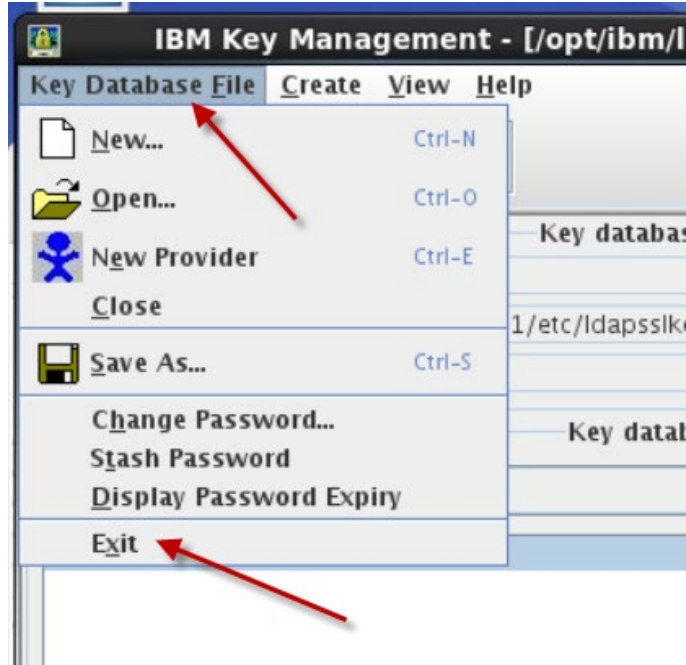
**Create New Self-Signed Certificate**

Please provide the following:

<b>Key Label</b>	<input type="text" value="ldapsslkey"/>
<b>Version</b>	X509 V3
<b>Key Size</b>	1024
<b>Signature Algorithm</b>	SHA1WithRSA
<b>Common Name (optional)</b>	<input type="text" value="host1.tivoli.edu"/>
<b>Organization (optional)</b>	<input type="text"/>
<b>Organizational Unit (optional)</b>	<input type="text"/>
<b>Locality (optional)</b>	<input type="text"/>
<b>State/Province (optional)</b>	<input type="text"/>
<b>Zipcode (optional)</b>	<input type="text"/>
<b>Country or region (optional)</b>	<input type="text"/>
<b>Validity Period</b>	<input type="text" value="999"/> Days
<b>Subject Alternative Names</b>	
<b>Email Address (optional)</b>	<input type="text"/>
<b>IP Address (optional)</b>	<input type="text"/>
<b>DNS Name (optional)</b>	<input type="text"/>

**OK** **Reset** **Cancel**

s. Click **Key Database File > Exit**.



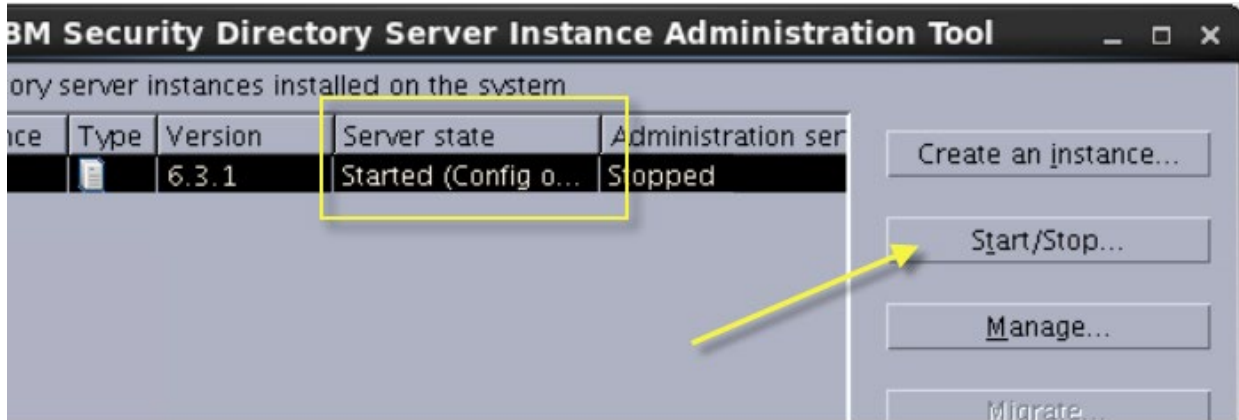
3. Start the LDAP server and the Administration server.

a. Run the following command to start the SDS Instance Administration tool.

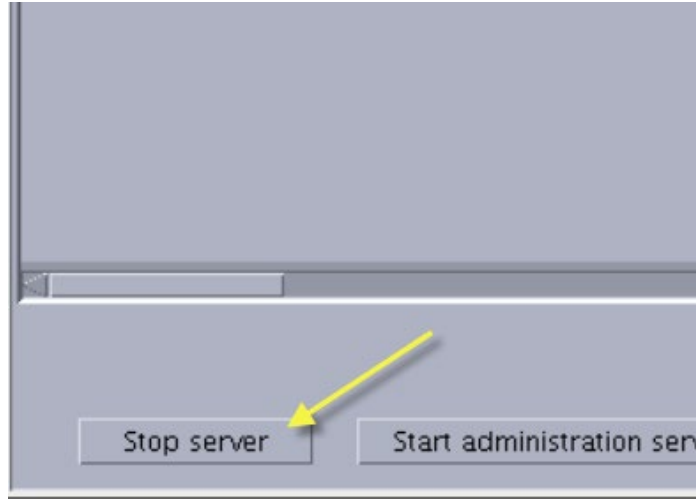
```
/opt/ibm/ldap/V6.3.1/sbin/idsxinst
```

b. Notice that the server state is **Started (config only)**.

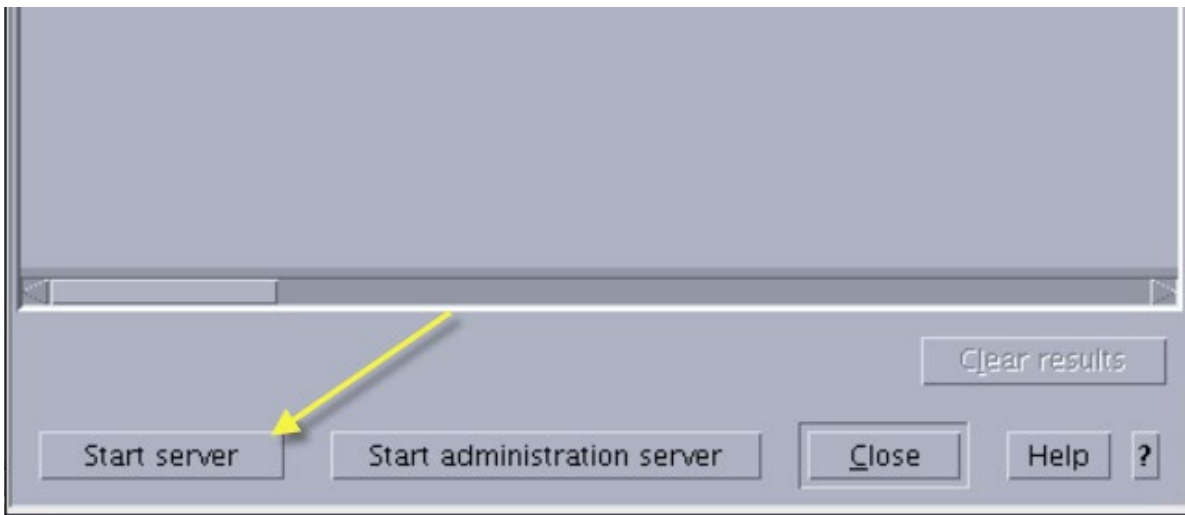
c. Click **Start/Stop**.



d. Click **Stop server**. After a moment, the server stops.



e. Click **Start server**. After a moment, the server starts.

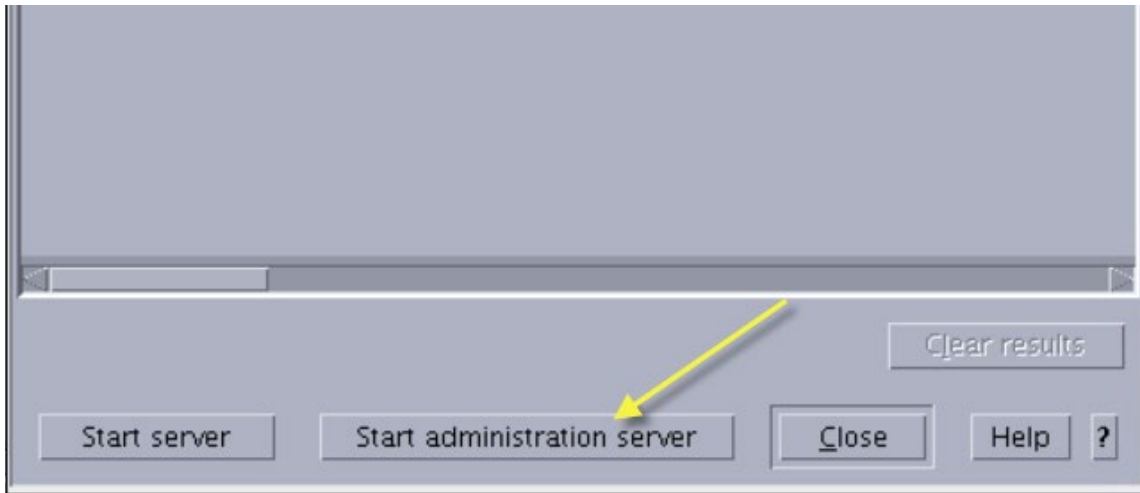


f. Click **OK** to confirm.

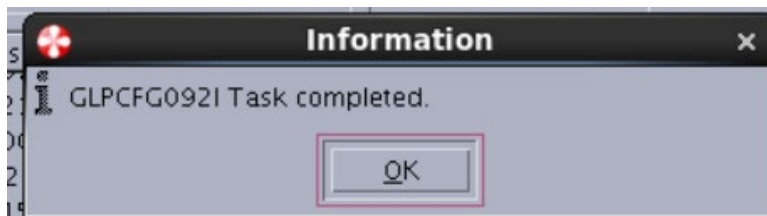




- g. Click **Start administration server**. After a moment, the server starts.



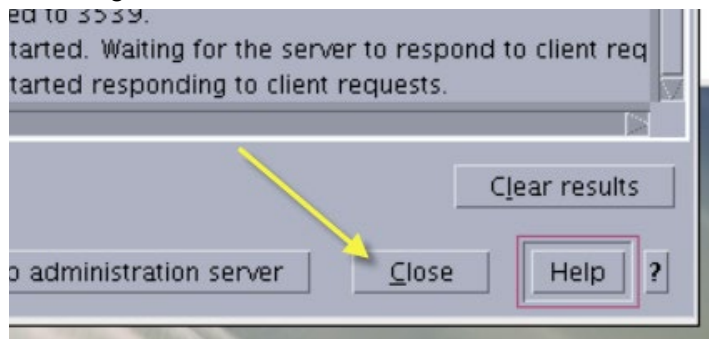
- h. Click **OK** to confirm.



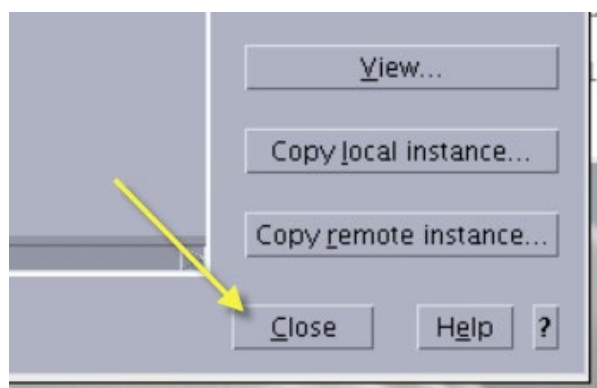
- i. Confirm that the state of both servers is **Started**.



- j. Click **Close** to exit the Manage server state window.



- k. Click **Close** to exit the SDS Instance Administration tool.



## Verification

Run the following steps to verify that the LDAP server is working properly.

1. Run the following two commands on **host1.tivoli.edu** as the root user to query the LDAP server.

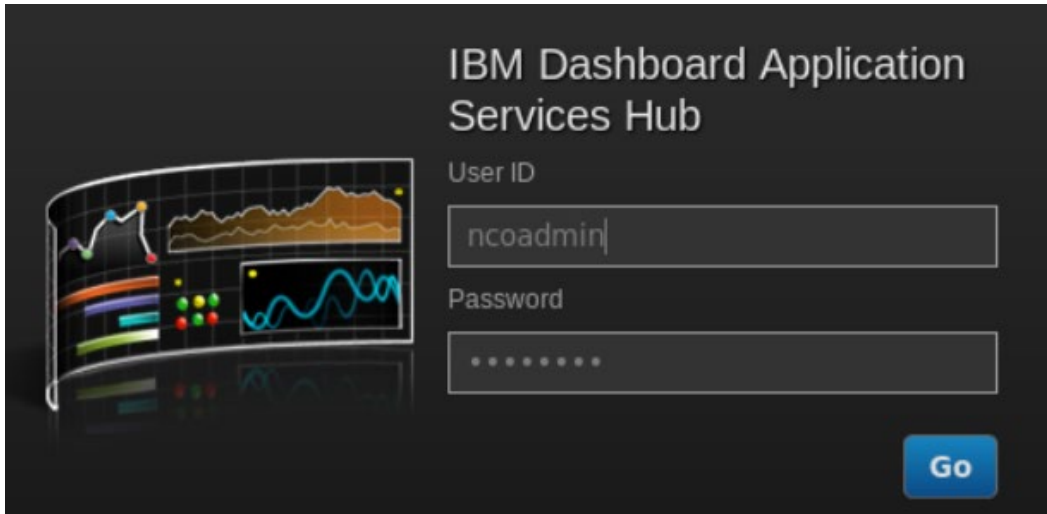
```
cd /opt/ibm/ldap/V6.3.1/bin
```

```
./ldapsearch -v -D cn=root -w object00 -h host1.tivoli.edu -p 389 -b dc=ibm,dc=com uid=*  
1.1
```

If the LDAP server is working correctly, the output of the preceding command should look like the following example.

```
uid=tcruser1,ou=tipusers,cn=tipRealm,dc=ibm,dc=com  
uid=tcruser2,ou=tipusers,cn=tipRealm,dc=ibm,dc=com  
uid=tipuser1,ou=tipusers,cn=tipRealm,dc=ibm,dc=com  
uid=tipuser2,ou=tipusers,cn=tipRealm,dc=ibm,dc=com  
uid=root,cn=tipRealm,dc=ibm,dc=com  
cn=Tinisha Fowble,ou=tipusers,cn=tipRealm,dc=ibm,dc=com  
...output omitted...  
30 matches
```

2. Verify that the **ncoadmin** user can log in to DASH.
  - a. Go to the **host2.tivoli.edu** lab image, or to the image where DASH is running.
  - b. Open a Firefox browser within the lab image.
  - c. Go to the following URL. You might need to replace the fully qualified domain name (FQDN) in this example with the FQDN of the host where DASH is running.  
<https://host2.tivoli.edu:16311/ibm/console/logon.jsp>
  - d. Log in with the user name **ncoadmin** and the password **object00**.



- e. Verify that the **ncoadmin** user can log in to DASH.

### Student Notebook items

None reported.

### Course presentation items by unit

None reported.

***End of document***