

SECTION 6 Manage User Accounts

In this section of the workbook, you learn how to do the following:

- “Use the SLES 9 OpenLDAP Server” on 6-1
- “Change Security Settings Using YaST” on 6-6
- “Manage User Accounts with YaST” on 6-8
- “Use Files in /etc/skel/” on 6-9
- “Use ACLs to Change File Permissions” on 6-10

Exercise 6-1 Use the SLES 9 OpenLDAP Server

Use the OpenLDAP server by doing the following:

- Part I: Install GQ
- Part II: Search the SLES 9 OpenLDAP Server
- Part III: Browse the SLES 9 OpenLDAP Server
- Part IV: Use an LDIF File to Add an User

Part I: Install GQ

To install GQ, complete the following:

1. From the KDE menu, select **System > YaST**.
2. Type the root password of **novell**; then select **OK**.
3. From the YaST Control Center, select
Software > Install and Remove Software
4. From the filter drop-down menu, select **Search**.

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In this section of the workbook, you learn how to do the following:

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- “Change Security Settings Using YaST” on 6-6
- “Manage User Accounts with YaST” on 6-8
- “Use Files in /etc/skel/” on 6-9
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Exercise 6-1 Use the SLES 9 OpenLDAP Server

Use the OpenLDAP server by doing the following:

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- Part III: Browse the SLES 9 OpenLDAP Server
- Part IV: Use an LDIF File to Add an User

Part I: Install GQ

To install GQ, complete the following:

1. From the KDE menu, select **System > YaST**.
2. Type the root password of **novell**; then select **OK**.
3. From the YaST Control Center, select
Software > Install and Remove Software
4. From the filter drop-down menu, select **Search**.

5. In the Search field, type **gq**; then select **Search**.
6. On the right, select the GQ package.
7. Install the GQ application by selecting **Accept**.
8. When the installation is complete, close the YaST Control Center.

Part II: Search the SLES 9 OpenLDAP Server

To select the SLES 9 OpenLDAP server, complete the following:

1. From the KDE menu, select **System > GQ LDAP Client**.
2. Make sure that **Search** is selected.
3. In the left search field, enter **uid=geeko**.
4. In the right search field, enter **dc=digitalairlines,dc=com**.
5. Select **Find**.
A result line appears.
6. Double-click the result line.
The LDAP entry for the user geeko is displayed.
7. Scroll down and verify that you cannot see the password entry for geeko.
8. Select **Close**.
9. From the menu bar, select **File > Preferences**.
10. From the configuration dialog, select **Servers**.
11. Select the entry **Localhost**; then select **Edit**.
12. From the server dialog, select **Details**.
13. In the Bind DN field, enter
cn=Administrator,dc=digitalairlines,dc=com
14. Close the server dialog by selecting **OK**.

5. In the Search field, type **gq**; then select **Search**.
6. On the right, select the GQ package.
7. Install the GQ application by selecting **Accept**.
8. When the installation is complete, close the YaST Control Center.

Part II: Search the SLES 9 OpenLDAP Server

To select the SLES 9 OpenLDAP server, complete the following:

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2. Make sure that **Search** is selected.
3. In the left search field, enter **uid=geeko**.
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5. Select **Find**.
A result line appears.
6. Double-click the result line.
The LDAP entry for the user geeko is displayed.
7. Scroll down and verify that you cannot see the password entry for geeko.
8. Select **Close**.
9. From the menu bar, select **File > Preferences**.
10. From the configuration dialog, select **Servers**.
11. Select the entry **Localhost**; then select **Edit**.
12. From the server dialog, select **Details**.
13. In the Bind DN field, enter
cn=Administrator,dc=digitalairlines,dc=com
14. Close the server dialog by selecting **OK**.

15. Close the configuration dialog by selecting **OK**.
16. Make sure that the search fields still contain the previously entered query.
17. Select **Find**.
18. When prompted for a password, enter **novell**.
19. Double-click the result line.
20. Make sure that you can see the password entry for the user geeko.



Access to the password is granted to the authenticated administrator only, not anonymous users.

21. After finishing, select **Close**.

Part III: Browse the SLES 9 OpenLDAP Server

To browse the SLES 9 OpenLDAP Server, complete the following:

1. From the GQ application, select **Browse**.
2. On the left, expand **localhost**.
3. Expand **dc=digitalairlines,dc=com**.
4. Expand **people**.

All users of the system are displayed. At the moment, this only includes geeko.

5. Select **geeko**.

The user information for geeko appears on the right.

6. Close the GQ window.

15. Close the configuration dialog by selecting **OK**.
16. Make sure that the search fields still contain the previously entered query.
17. Select **Find**.
18. When prompted for a password, enter **novell**.
19. Double-click the result line.
20. Make sure that you can see the password entry for the user geeko.



Access to the password is granted to the authenticated administrator only, not anonymous users.

21. After finishing, select **Close**.

Part III: Browse the SLES 9 OpenLDAP Server

To browse the SLES 9 OpenLDAP Server, complete the following:

1. From the GQ application, select **Browse**.
2. On the left, expand **localhost**.
3. Expand **dc=digitalairlines,dc=com**.
4. Expand **people**.

All users of the system are displayed. At the moment, this only includes geeko.

5. Select **geeko**.

The user information for geeko appears on the right.

6. Close the GQ window.

Part IV: Use an LDIF File to Add an User

To use an LDIF file to add an user, do the following:

1. With a text editor, create a file with the following content:

```
dn:uid=konqi,ou=people,dc=digitalairlines,dc=com  
objectClass: top  
objectClass: posixAccount  
objectClass: shadowAccount  
objectClass: inetOrgPerson  
cn: Konqi Draegon  
gidNumber: 100  
givenName: Konqi  
homeDirectory: /home/konqi  
loginShell: /bin/bash  
shadowInactive: -1  
shadowLastChange: 12609  
shadowMax: 99999  
shadowMin: 0  
shadowWarning: 7  
sn: Draegon  
uid: konqi  
userPassword: {crypt}GpyJ3/OQgLxZE  
uidNumber: 1010
```

2. Save the file with the name **konqi.ldif** in the directory **/tmp/**.
3. Launch a terminal window:
 - a. **Press Alt + F2.**

Part IV: Use an LDIF File to Add an User

To use an LDIF file to add an user, do the following:

1. With a text editor, create a file with the following content:

```
dn:uid=konqi,ou=people,dc=digitalairlines,dc=com  
objectClass: top  
objectClass: posixAccount  
objectClass: shadowAccount  
objectClass: inetOrgPerson  
cn: Konqi Draegon  
gidNumber: 100  
givenName: Konqi  
homeDirectory: /home/konqi  
loginShell: /bin/bash  
shadowInactive: -1  
shadowLastChange: 12609  
shadowMax: 99999  
shadowMin: 0  
shadowWarning: 7  
sn: Draegon  
uid: konqi  
userPassword: {crypt}GpyJ3/OQgLxZE  
uidNumber: 1010
```

2. Save the file with the name **konqi.ldif** in the directory **/tmp/**.
3. Launch a terminal window:
 - a. **Press Alt + F2.**

- b. Enter **konsole**.
- c. Select **Run**.
4. Get root privileges by entering **sux -** and a password of **novell**.
5. Add the user konqi by entering the following (all on one line):
ldapadd -x -D
"cn=Administrator,dc=digitalairlines,dc=com" -W -f
/tmp/konqi.ldif
6. When prompted for a password, enter **novell**.



If you cannot authenticate as Administrator, close the terminal window and open a new terminal window. Then repeat Steps 3 and 4.



You do not have to be logged in as root to enter the **ldapadd** command; however, you need to be authenticated as root for the commands that follow.

7. Create the home directory for the user konqi by entering
mkdir /home/konqi
cp -a /etc/skel/* /home/konqi
8. Adjust the file system permissions by entering
chown -R konqi:users /home/konqi/
9. Log out as root by entering **exit**.
10. Switch to the user konqi by entering
su - konqi

You can now log in to the konqi user account by entering the password of **N0v3ll**.

11. Log out as konqi by pressing **Ctrl + d**.

(End of Exercise)

- b. Enter **konsole**.
- c. Select **Run**.
4. Get root privileges by entering **sux -** and a password of **novell**.
5. Add the user konqi by entering the following (all on one line):
ldapadd -x -D
"cn=Administrator,dc=digitalairlines,dc=com" -W -f
/tmp/konqi.ldif
6. When prompted for a password, enter **novell**.



If you cannot authenticate as Administrator, close the terminal window and open a new terminal window. Then repeat Steps 3 and 4.



You do not have to be logged in as root to enter the **ldapadd** command; however, you need to be authenticated as root for the commands that follow.

7. Create the home directory for the user konqi by entering
mkdir /home/konqi
cp -a /etc/skel/* /home/konqi
8. Adjust the file system permissions by entering
chown -R konqi:users /home/konqi/
9. Log out as root by entering **exit**.
10. Switch to the user konqi by entering
su - konqi

You can now log in to the konqi user account by entering the password of **N0v3ll**.

11. Log out as konqi by pressing **Ctrl + d**.

(End of Exercise)

Exercise 6-2 Change Security Settings Using YaST

To change security settings using YaST, complete the following:

1. Ensure you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch a terminal window:
 - a. **Press Alt + F2.**
 - b. Enter **konsole**.
 - c. Select **Run**.
3. Get root privileges by entering **sux -** and a password of **novell**.
4. Enter **less /etc/security/pam_unix2.conf** and record the line starting with **password**:

5. Quit **less** by pressing **q**.
6. Now enter **less /etc/sysconfig/security** and record the value for **PERMISSION_SECURITY**:

7. Quit **less** by pressing **q**.
8. Launch YaST from the main menu by selecting **System > Configuration > YaST Control Center**
9. Enter the root password **novell** in the Authentication window.
10. On the left, select **Security and Users**.
11. On the right, select **Security Settings**.
12. Ensure that **Custom Settings** is selected and select **Next**.
13. From the Password Encryption Method drop-down list box, select **MD5**.

Exercise 6-2 Change Security Settings Using YaST

To change security settings using YaST, complete the following:

1. Ensure you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch a terminal window:
 - a. **Press Alt + F2.**
 - b. Enter **konsole**.
 - c. Select **Run**.
3. Get root privileges by entering **sux -** and a password of **novell**.
4. Enter **less /etc/security/pam_unix2.conf** and record the line starting with **password**:

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6. Now enter **less /etc/sysconfig/security** and record the value for **PERMISSION_SECURITY**:

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8. Launch YaST from the main menu by selecting **System > Configuration > YaST Control Center**
9. Enter the root password **novell** in the Authentication window.
10. On the left, select **Security and Users**.
11. On the right, select **Security Settings**.
12. Ensure that **Custom Settings** is selected and select **Next**.
13. From the Password Encryption Method drop-down list box, select **MD5**.

14. Select **Next**.
15. On the Boot Settings screen, look at the options but do not perform any changes; then select **Next**.
16. On the Login Settings screen, select **Next**.
17. On the Adding User screen, select **Next**.
18. On the Miscellaneous Settings screen, select **Secure** from the Setting of File Permissions drop-down list box.
19. Apply your changes by selecting **Finish**.
20. Close YaST by selecting **Close**.
21. On your terminal window, enter
less /etc/security/pam_unix2.conf
22. Record the difference on the line starting with **password**:

23. Close **less** by pressing **q**.
24. Enter **less /etc/sysconfig/security** and record the different value for the variable **PERMISSION_SECURITY**:

25. Close **less** by pressing **q**.
26. Enter **less /etc/login.defs** to verify that this file has been modified according to your changes.
27. Close **less** by pressing **q**.
28. End the su session by entering **exit** twice.
29. Quit the terminal window.

(End of Exercise)

14. Select **Next**.
15. On the Boot Settings screen, look at the options but do not perform any changes; then select **Next**.
16. On the Login Settings screen, select **Next**.
17. On the Adding User screen, select **Next**.
18. On the Miscellaneous Settings screen, select **Secure** from the Setting of File Permissions drop-down list box.
19. Apply your changes by selecting **Finish**.
20. Close YaST by selecting **Close**.
21. On your terminal window, enter
less /etc/security/pam_unix2.conf
22. Record the difference on the line starting with **password**:

23. Close **less** by pressing **q**.
24. Enter **less /etc/sysconfig/security** and record the different value for the variable **PERMISSION_SECURITY**:

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26. Enter **less /etc/login.defs** to verify that this file has been modified according to your changes.
27. Close **less** by pressing **q**.
28. End the su session by entering **exit** twice.
29. Quit the terminal window.

(End of Exercise)

Exercise 6-3 Manage User Accounts with YaST

To manage user accounts with YaST, complete the following:



Before beginning this exercise, make sure user account data is kept in the OpenLDAP directory.

1. Ensure you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch YaST from the main menu by selecting **System > Configuration > YaST Control Center**
3. Enter the root password of **novell** in the Authentication window.
4. On the left side, select **Security and Users**.
5. On the right side, select **Edit and Create Users**.
6. Enter the root password of **novell** for the OpenLDAP directory.
7. Add a new user by selecting **Add**.
8. Enter the following credentials for the new user:
Given name: **Tux**
Surname: **Penguin**
Login: **tux**
Password: **N0v3ll**
9. Select **Password Settings** and look at the entries.
10. Do not change anything and cancel out.
11. Check the entries by selecting **Details**.
12. Do not change anything and cancel out.
13. Select **Next** and **Finish**.
14. Close YaST by selecting **Close**.

Exercise 6-3 Manage User Accounts with YaST

To manage user accounts with YaST, complete the following:



Before beginning this exercise, make sure user account data is kept in the OpenLDAP directory.

1. Ensure you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch YaST from the main menu by selecting **System > Configuration > YaST Control Center**
3. Enter the root password of **novell** in the Authentication window.
4. On the left side, select **Security and Users**.
5. On the right side, select **Edit and Create Users**.
6. Enter the root password of **novell** for the OpenLDAP directory.
7. Add a new user by selecting **Add**.
8. Enter the following credentials for the new user:
Given name: **Tux**
Surname: **Penguin**
Login: **tux**
Password: **N0v3ll**
9. Select **Password Settings** and look at the entries.
10. Do not change anything and cancel out.
11. Check the entries by selecting **Details**.
12. Do not change anything and cancel out.
13. Select **Next** and **Finish**.
14. Close YaST by selecting **Close**.

15. Launch a terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
16. Perform an OpenLDAP search by entering
ldapsearch -x -b "ou=people, dc=digitalairlines, dc=com" 'uid=tux'
17. Get root privileges by entering **sux -** and the password of **novell**.
18. Delete the user you just created with YaST by entering
userdel --service LDAP -D "cn=Administrator, dc=digitalairlines, dc=com" -r tux

(End of Exercise)

Exercise 6-4 Use Files in /etc/skel/

To make use of /etc/skel/, complete the following:

1. Ensure you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch a terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
3. Get root privileges by entering **sux -** and a password of **novell**.
4. Change directories by entering **cd /etc/skel/**.
5. View the contents of the directory by entering **ls -a**.
6. Create a new file in the directory by entering
echo Have a lot of fun... > welcome

15. Launch a terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
16. Perform an OpenLDAP search by entering
ldapsearch -x -b "ou=people, dc=digitalairlines, dc=com" 'uid=tux'
17. Get root privileges by entering **sux -** and the password of **novell**.
18. Delete the user you just created with YaST by entering
userdel --service LDAP -D "cn=Administrator, dc=digitalairlines, dc=com" -r tux

(End of Exercise)

Exercise 6-4 Use Files in /etc/skel/

To make use of /etc/skel/, complete the following:

1. Ensure you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch a terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
3. Get root privileges by entering **sux -** and a password of **novell**.
4. Change directories by entering **cd /etc/skel/**.
5. View the contents of the directory by entering **ls -a**.
6. Create a new file in the directory by entering
echo Have a lot of fun... > welcome

7. Create a new user by entering
useradd --service LDAP -D "cn=Administrator, dc=digitalairlines, dc=com" -m tux2
8. Switch to the ID of the new user by entering **su - tux2**.
9. Look at the welcome file in the home directory by entering
cat welcome
10. Exit the terminal window by entering **exit** twice.

(End of Exercise)

Exercise 6-5 Use ACLs to Change File Permissions

To use ACLs to change file permissions, complete the following:

1. Ensure you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch a terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
3. Get root privileges by entering **su -** and a password of **novell**.
4. Create a file by entering **touch /tmp/textfile**.
5. Launch another terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
6. Try to enter data in the new file by entering
echo hello > /tmp/textfile

You will see the message Permission Denied.

7. Create a new user by entering
useradd --service LDAP -D "cn=Administrator, dc=digitalairlines, dc=com" -m tux2
8. Switch to the ID of the new user by entering **su - tux2**.
9. Look at the welcome file in the home directory by entering
cat welcome
10. Exit the terminal window by entering **exit** twice.

(End of Exercise)

Exercise 6-5 Use ACLs to Change File Permissions

To use ACLs to change file permissions, complete the following:

1. Ensure you are logged in to your server's GUI as **geeko** with a password of **N0v3ll**.
2. Launch a terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
3. Get root privileges by entering **su -** and a password of **novell**.
4. Create a file by entering **touch /tmp/textfile**.
5. Launch another terminal window:
 - a. Press **Alt + F2**.
 - b. Enter **konsole**.
 - c. Select **Run**.
6. Try to enter data in the new file by entering
echo hello > /tmp/textfile

You will see the message Permission Denied.

7. In the terminal window with root permissions, set the ACL of the file by entering
setfacl -m user:geeko:rw /tmp/textfile
8. Check the result by entering **getfacl /tmp/textfile**.
9. In the terminal with the permissions of geeko, redo the write attempt to the file by pressing **Up-arrow** and **Enter**.
10. Verify that the content has been added by entering
cat /tmp/textfile
11. Switch to the ID of tux2 by entering **su - tux2**.
12. Try to append data to the file by entering
echo tux2 >> /tmp/textfile
13. What happens and why?

14. Close all terminal windows.

(End of Exercise)

7. In the terminal window with root permissions, set the ACL of the file by entering
setfacl -m user:geeko:rw /tmp/textfile
8. Check the result by entering **getfacl /tmp/textfile**.
9. In the terminal with the permissions of geeko, redo the write attempt to the file by pressing **Up-arrow** and **Enter**.
10. Verify that the content has been added by entering
cat /tmp/textfile
11. Switch to the ID of tux2 by entering **su - tux2**.
12. Try to append data to the file by entering
echo tux2 >> /tmp/textfile
13. What happens and why?

14. Close all terminal windows.

(End of Exercise)

