

**INSTITUTE OF COMPUTER TECHNOLOGY**  
**B-TECH COMPUTER SCIENCE ENGINEERING 2025-26**  
**SUBJECT: IDENTITY ACCESS MANAGEMENT**

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**Lab 12: Provisioning resources exercises**

**Exercise 7.1 – Adding Users to a Static Role**

**Objective:** Assign users to organizational roles before creating provisioning policies.

**Task 1: Assign JKE System Admin Role**

1. Log in to ISIM as itim manager.
2. Navigate to **Home**  $\rightarrow$  **Manage Users**.
3. Search for and select **Alice Smyth**  $\rightarrow$  **Personal Information** tab.
4. Add the **JKE System Admin** organizational role to Alice Smyth.
5. Click **Submit Now**  $\rightarrow$  **Close**.

Change User

\*Personal Information

Business Information

Contact Information

Assignment Attributes

Manage Users > Change User > Personal Information

Type the appropriate information for the user. When you are done specifying information on each of the tabs, Click Submit Now to change the user immediately or Schedule Submission to schedule the request.

\*Last name

Smyth

\*Full name

Alice Smyth

\*Preferred user ID

asmyth

First name

Alice

Initials

Home address

Shared secret

Organizational roles

Add

JKE System Admin

Asset Handling And Disposition

Booking and Ledgers

ITIM Administrators

Search...

Delete

Submit Now

Schedule Submission

Cancel

6. Repeat steps 3-5 for user **Douglas Adams**.

7. Repeat steps 3-5 for user **Edwin Abbott**.

7. Repeat steps 3-5 for user **Edwin Abbott**.

Change User	
<div> <div>*Personal Information</div> <div>Business Information</div> <div>Contact Information</div> <div>Assignment Attributes</div> </div>	<div>Manage Users &gt; Change User &gt; Personal Information</div> <div>Type the appropriate information for the user. When you are done specifying information on each of the tabs, Click Submit Now to change the user immediately or Schedule Submission to schedule the request.</div> <div> <div>*Last name</div> <div>Abbott</div> </div> <div> <div>*Full name</div> <div>Edwin Abbott</div> </div> <div> <div>*Preferred user ID</div> <div>eabbott</div> </div> <div> <div>First name</div> <div>Edwin</div> </div> <div> <div>Initials</div> <div></div> </div> <div> <div>Home address</div> <div></div> </div> <div> <div>Shared secret</div> <div></div> </div> <div> <div>Organizational roles</div> <div> <div></div> <div> <div>JKE System Admin</div> <div>JKE Managers</div> </div> </div> <div> <div>Add</div> <div>Search...</div> <div>Delete</div> </div> </div>
<div> <div>Submit Now</div> <div>Schedule Submission</div> <div>Cancel</div> </div>	

## Task 2: Assign System Accounts Owner Role

1. Navigate to **Home** \$\rightarrow\$ **Manage Users**.
2. Search for and select user **Linux System-Accounts** \$\rightarrow\$ **Personal Information** tab.

Change User

**Manage Users > Change User > Personal Information**

Type the appropriate information for the user. When you are done specifying information on each of the tabs, Click Submit Now to change the user immediately or Schedule Submission to schedule the request.

**\*Personal Information**

[Business Information](#)

[Contact Information](#)

[Assignment Attributes](#)

\*Last name  
System-Accounts

\*Full name  
Linux System-Accounts

\*Preferred user ID  
linuxsystemaccounts

First name  
Linux

Initials

Home address

Shared secret

Organizational roles

ITIM Administrators  
JKE System Admin  
System Account Owner

Add

Search...

Delete

Submit Now Schedule Submission Cancel

3. Add the **System Accounts Owner** organizational role to Linux System-Accounts.
4. Click **Submit Now**  $\rightarrow$  **Close**.

## Exercise 7.2 – Creating a Provisioning Policy

**Objective:** Enable automatic Linux account creation for users in the JKE System Admin role.

1. Navigate to **Home**  $\rightarrow$  **Manage Policies**  $\rightarrow$  **Manage Provisioning Policies**.
2. Open the **Default Provisioning Policy for Linux Service**.
3. Modify the policy details as follows:
  - o Set **Policy Name** to **Admin Linux Accounts**.

- Set **Status** to **Enabled**.
- Set **Priority** to 100.
- Set **Members** to the organizational role **JKE System Admin**.

Manage Provisioning Policies

\*General
\*Members
\*Entitlements

### Manage Policies > Manage Provisioning Policies > General

Specify information for the policy, the business unit to which the policy applies, and the scope of the policy within the organization. When you are done specifying information on each of the tabs, click Preview to review your changes, or click Save as Draft if you want to save your changes and finish this definition at a later time. Click Submit to save your changes now. Click Cancel to exit without saving your changes.

\*Policy name

Admin Linux Accounts

Caption

Make policy available to services in

☒ This business unit and its subunits
☐ This business unit only

Description

Created during service creation

Policy status

☒ Enable
☐ Disable

\*Priority (integer greater than 0)

100

Keywords

\*Business unit

JK Enterprises

Search...

Submit

Preview...

Save as Draft

Cancel

4. Navigate to **Entitlements Configuration**.
5. Select **Linux Service**  $\rightarrow$  **Change**.
6. Set **Provisioning Options** to **Automatic**.
7. Set **Target Type** to **Specific Service**.
8. Set **Service Name** to **Linux Service**.

9. Leave **Workflow** field empty.
10. Click **Preview & Submit**.
11. On the Preview screen, choose to **enforce entire policy**.
12. Confirm the expected outcome of **4 new accounts** (Alice, Douglas, Edwin, Erica).
13. **Submit** and **enforce** the policy.

Manage Provisioning Policies

Manage Policies > Manage Provisioning Policies > Define Constant

To define an entitlement parameter for **UNIX shell** attribute, select a parameter type, enforcement type, and then provide further information required. When you are done, click Continue.

Parameter Type

☒ Constant Value

☐ JavaScript

☐ Null

Enforcement Type

☒ Default

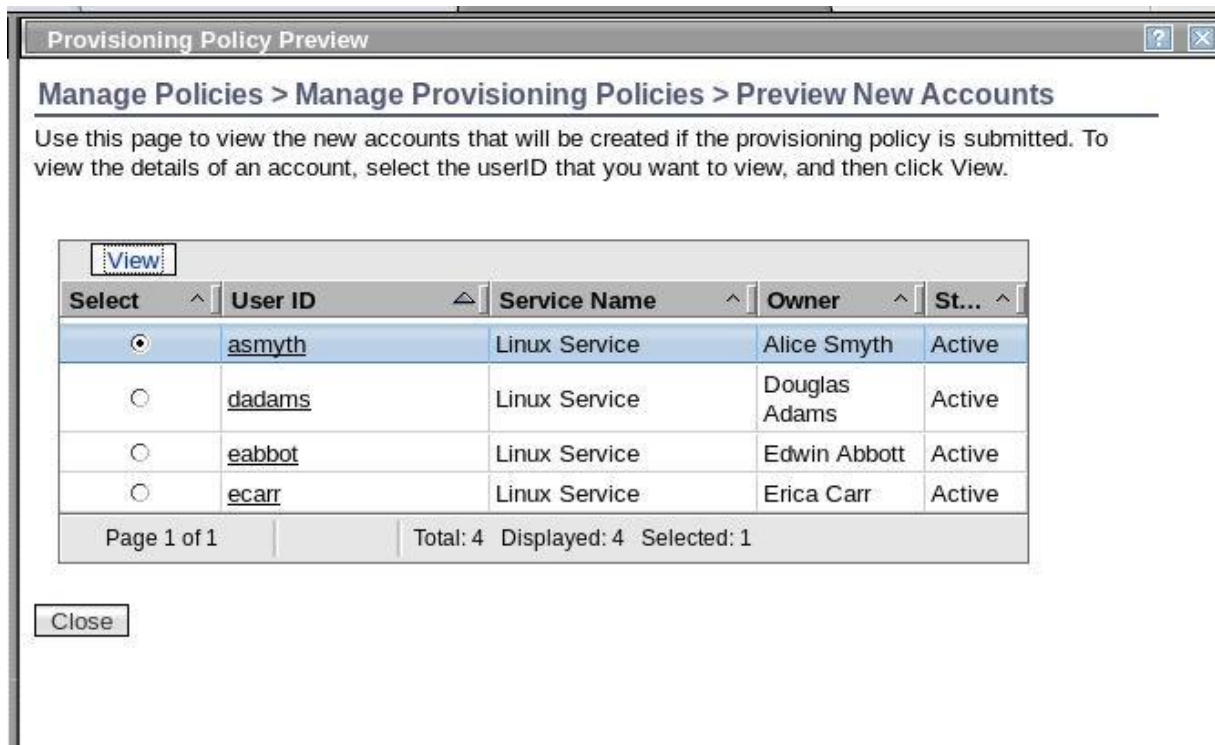
☐ Mandatory

UNIX shell

/bin/bash

Continue

Cancel



### Exercise 7.3 – Verifying Linux Account

**Provisioning Objective:** Review requests and confirm accounts on Linux.

1. Navigate to **Home** → **View Requests** → **View All Requests by User**.
2. Open the **Modify Provisioning Policy** request associated with the policy enforcement.
3. Confirm that the request details show the successful creation of **4 accounts**.
4. *Implied:* Navigate to the accounts of Alice, Douglas, Edwin, and Erica and verify the existence of their new Linux accounts.



View All Requests by User

View Requests > View All Requests by User

To view the details for a particular request, click the request type.

Modify Provisioning Policy

Modify Policy

Account Add

Account Add

Account Add

Account Add

Process Details

View the details of the requests that were submitted by Workflow Sys

Request type

Account Add

Completion status

Success

Date submitted

November 21, 2025 at 8:14:27 AM

Date started

November 21, 2025 at 8:14:27 AM

Date completed

November 21, 2025 at 8:14:35 AM

Requested for

Douglas Adams

Request ID

2615600853427091

Service Name

Linux Service

Date scheduled

November 21, 2025 at 8:14:27 AM

Last modified

November 21, 2025 at 8:14:27 AM

root@isim:~

File Edit View Search Terminal Help

/null:/sbin/nologin

usbmuxd:x:113:113:usbmuxd user:/:/sbin/nologin

geoclue:x:990:986:User for geoclue:/var/lib/geoclue:/sbin/nologin

pulse:x:171:171:PulseAudio System Daemon:/var/run/pulse:/sbin/nologin

gdm:x:42:42::/var/lib/gdm:/sbin/nologin

saned:x:989:983:SANE scanner daemon user:/usr/share/sane:/sbin/nologin

rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin

nfsnobody:x:65534:65534:Anonymous NFS User:/var/lib/nfs:/sbin/nologin

gnome-initial-setup:x:988:982::/run/gnome-initial-setup:/sbin/nologin

sshd:x:74:74:Privilege-separated SSH:/var/empty/sshd:/sbin/nologin

avahi:x:70:70:Avahi mDNS/DNS-SD Stack:/var/run/avahi-daemon:/sbin/nologin

postfix:x:89:89::/var/spool/postfix:/sbin/nologin

tcpdump:x:72:72::/sbin/nologin

tushar:x:1000:1000:tushar:/home/tushar:/bin/bash

idsldap:x:1001:1001::/home/idsldap:/bin/ksh

itimuser:x:1002:1002::/home/itimuser:/bin/ksh

db2admin:x:1003:1003::/home/db2admin:/bin/ksh

db2fenc1:x:1004:1004::/home/db2fenc1:/bin/ksh

isimldap:x:1005:1001::/home/isimldap:/bin/ksh

ecarr:x:1006:1006::/home/ecarr:/bin/bash

dadams:x:1007:1007::/home/dadams:/bin/bash

asmyth:x:1008:1008::/home/asmyth:/bin/bash

eabbot:x:1009:1009::/home/eabbot:/bin/bash

root@isim ~| #


## Exercise 7.4 – Verifying Password Policy

**Objective:** Confirm password restrictions for the Linux Service.

1. Navigate to **Home** → **Manage Users** → **Alice Smyth**.
2. Select the **Change Passwords** tab/action.
3. Enter a short password, such as aa, and click **Submit**.
4. Observe the resulting **password violation message** (e.g., "Password does not meet minimum length requirements").

### Change Passwords

To change the password for **Alice Smyth**, select whether you want to have the system generate the password or whether you want to specify the password now. If you specify a password, it must conform to the rules for the password for this account. To view these rules, click [View password strength rules](#).

**CTGIMU017E**  
The password specified for the selected accounts does not comply with all of the password rules defined for these accounts.

**CTGIME012E**  
The password does not meet the requirements of the password rule. The following error occurred. Error: CTGIMH011E The password does not adhere to the minimum number of characters.

[Close Message](#)

☐ Generate a password for me  
☒ Allow me to type a password

Password  
●●

Confirm Password  
●●

[View password strength rules](#)

#### Accounts

Your password will be changed for the accounts listed in the table below.

Service Name	User ID
<a href="#">ITIM Service</a>	<a href="#">asmith</a>
<a href="#">Linux Service</a>	<a href="#">asmyth</a>

5. Check the configured password strength rules for the Linux service profile.

▼ Hide password strength rules

Password Rule	Setting
Minimum length	4

Page 1 of 1

Total: 1   Displayed: 1

Accounts

Your password will be changed for the accounts listed in the table below.

## Exercise 7.5 – Creating a Provisioning Policy for JKE Managers

**Objective:** Give Linux accounts to users in the JKE Managers role and introduce an attribute conflict.

1. Create a new provisioning policy.
2. Set the policy details as follows:
  - Set **Policy Name** to **Manager Linux Accounts**.
  - Set **Status** to **Enabled**.
  - Set **Priority** to **50**.
  - Set **Members** to the organizational role **JKE Managers**.

Manage Provisioning Policies

\*General

\*Members

\*Entitlements

Manage Policies > Manage Provisioning Policies > General

Specify information for the policy, the business unit to which the policy applies, and the scope of the policy within the organization. When you are done specifying information on each of the tabs, click Preview to review your changes, or click Save as Draft if you want to save your changes and finish this definition at a later time. Click Submit to save your changes now. Click Cancel to exit without saving your changes.

\*Policy name

Manage Linux Accounts

Caption

Make policy available to services in

☒ This business unit and its subunits

☐ This business unit only

Description

Policy status

☒ Enable

☐ Disable

\*Priority (integer greater than 0)

50

Keywords

\*Business unit

JK Enterprises

Search...

Submit

Preview...

Save as Draft

Cancel

3. Navigate to **Entitlements Configuration**  $\rightarrow$  **Linux Service**  $\rightarrow$  **Parameters**.

Manage Provisioning Policies

\*General

\*Members

\*Entitlements

## Manage Policies > Manage Provisioning Policies > Members

Members are the set of users that are granted entitlements through a policy. Specify which members are granted the entitlements that are defined in this policy by selecting all users in the organization, individual roles, or all users who are not defined in other policies. If you choose to select the roles, you can only select existing roles.

\*Member Type

☐ All users in the organization  
☐ All other users who are not granted to the entitlement(s) defined by this provisioning policy via other policies  
☒ Roles specified below

AddRemove

Select ^	Name ^	Description ^	Business unit ^
<input type="checkbox"/>	JKE Managers	Organizational role for JKE Managers	JK Enterprises

Page 1 of 1
Total: 1
Displayed: 1
Selected: 0

Submit

Preview...

Save as Draft

Cancel

4. Add an entitlement parameter:
  - Set **Attribute** to **Shell**.
  - Set **Enforcement Type** to **Mandatory**.
  - Set **Value** to **/bin/ksh**.

## Manage Policies > Manage Provisioning Policies > Account Entitlement

Account entitlement enables accounts to be created on the specified services. Specify the scope of the account access. Your choices depend on the target type or the ownership type or both that you select.

### Provisioning options

- ☐ Manual  
☒ Automatic

### Ownership type

Individual

### Target type

Specific Service

### \*Service Name

Linux Service

Search...

### Workflow

Search...

Clear

OK

Cancel

5. Submit and enforce the policy.
6. **Expected Outcome:** New accounts are provisioned for JKE Managers.  
Users Douglas and Edwin (who are in both roles) will be flagged as **non-compliant** because their existing Linux account shell does not match the mandatory /bin/ksh value, and the Manager policy has higher precedence (Priority 50 is lower than 100).

## Manage Policies > Manage Provisioning Policies > Preview Policy Summary

Use this summary page to preview the impact of the provisioning policy on user accounts. You can click on the account links to view the details of the account changes. To stop evaluating the policy, click on Stop Evaluation button. This summary is automatically updated every 10 seconds until policy evaluation is completed or stopped.

Evaluation status: Completed

Accounts evaluated: 12

Error account: 0 accounts

**Provision new account: 10 accounts**

▶ **Disallowed account: 0 accounts**

▶ **Noncompliant account: 2 accounts**

▶ **Compliant account: 0 accounts**

Stop Evaluation Close



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## Exercise 7.6 – Verifying Policy Priority

**Objective:** Confirm that the Manager policy (Priority 50) overrides the Admin policy (Priority 100).

1. Navigate to **Manage Users** → **Douglas Adams** → **Accounts** tab.
2. Open the Linux account details.
3. Observe the **Warning: Shell non-compliant** message, confirming that the Manager policy is dictating the correct value.
4. Note that the account is not automatically corrected because the policy's enforcement mode is set to **Mark** (not Correct).

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### Manage Services > Manage Accounts > Noncompliant Account Attributes

The following attributes for account **dadams** on service **Linux Service** are noncompliant.

Attribute	Non-Compliant Value	Suggested Value
UNIX shell	/bin/bash	/bin/ksh
Page 1 of 1      Total: 1    Displayed: 1		

Close

---

## Exercise 7.7 – Provisioning Policy for System Accounts

**Objective:** Ensure the Linux System-Accounts user owns system accounts.

### Task 1: Policy Setup

1. Create a new provisioning policy.
2. Set the policy details as follows:
  - Set **Policy Name** to **System Linux Accounts**.
  - Set **Priority** to 10000.
  - Set **Members** to the organizational role **System Account Owner**.
  - Set **Ownership Type** to **System**.
  - Set **Provisioning** to **Manual**.

**\*General****\*Members****\*Entitlements****Manage Policies > Manage Provisioning Policies > General**

Specify information for the policy, the business unit to which the policy applies, and the scope of the policy within the organization. When you are done specifying information on each of the tabs, click Preview to review your changes, or click Save as Draft if you want to save your changes and finish this definition at a later time. Click Submit to save your changes now. Click Cancel to exit without saving your changes.

**\*Policy name**

System Linux Accounts

## Caption

Make policy available to services in

- ☒ This business unit and its subunits  
☐ This business unit only

## Description

## Policy status

- ☒ Enable  
☐ Disable

**\*Priority (integer greater than 0)**

10000

## Keywords

**\*Business unit**

JK Enterprises

Search...

Submit

Preview...

Save as Draft

Cancel

Manage Accounts

corresponding filter. Select an ownership type, then click Search. The accounts that match your criteria are displayed in the table below. By default, clicking Search will search the system based on the beginning letters of the item you are searching for. To search for a textual pattern in the middle of an item, use the "\*" symbol on the keyboard to indicate a wildcard. (For example, typing "b\*" will find "abc".)

Account information

Search by

User ID

Owner

Ownership Type

All

Accounts

To perform a particular task on an account, click the icon next to the name of the user ID, and then select the

44 results found for: \*

Request...

Change

Delete

Suspend

Restore

Assign to User

Refresh

<input type="checkbox"/>	S ^	State ^	User ID ^	Owner ^	Ownership Ty
<input type="checkbox"/>			<a href="#">abrt</a>	Linux System-Accounts	Individual
<input type="checkbox"/>			<a href="#">adm</a>	Linux System-Accounts	Individual
<input type="checkbox"/>			<a href="#">asmyth</a>	Alice Smyth	Individual
<input type="checkbox"/>			<a href="#">avahi</a>	Linux System-Accounts	Individual
<input type="checkbox"/>			<a href="#">bcarlt</a>	Brad Carlton	Individual
<input type="checkbox"/>			<a href="#">bin</a>	Linux System-Accounts	Individual
<input type="checkbox"/>			<a href="#">dadams</a>	Douglas Adams	Individual
<input type="checkbox"/>			<a href="#">daemon</a>	Linux System-Accounts	Individual
<input type="checkbox"/>			<a href="#">dbus</a>	Linux System-Accounts	Individual
<input type="checkbox"/>			<a href="#">ddrive</a>	Dianne Driver	Individual
<input type="checkbox"/>			<a href="#">dgoto</a>	Dengo Goto	Individual
<input type="checkbox"/>			<a href="#">eabbot</a>	Edwin Abbott	Individual
<input type="checkbox"/>			<a href="#">ecarr</a>	Erica Carr	Individual
<input type="checkbox"/>			<a href="#">ftp</a>	Linux System-Accounts	Individual
<input type="checkbox"/>			<a href="#">games</a>	Linux System-Accounts	Individual

## Task 2: Change Ownership

1. Navigate to the service containing the system accounts (e.g., Linux Service).
2. Filter the accounts to select those that should be system-owned.

## Assign Account

### Manage Services > Assign Account > Confirm



You have chosen to assign **30** accounts on the **Linux Service** service to the user **Linux System-Accounts**.

Are you sure you want to proceed?

[Assign to User](#)

[Cancel](#)

3. Select the accounts  $\rightarrow$  **Assign to User**.
4. Select the user **Linux System-Accounts**.
5. Confirm that the selected accounts now display **System** ownership.

Account information

linux

User ID



Owner

Ownership Type

All

### Accounts

To perform a particular task on an account, click the icon next to the name of the user ID, and then select the

30 results found for: linux

<a href="#">Request...</a> <a href="#">Change</a> <a href="#">Delete</a> <a href="#">Suspend</a> <a href="#">Restore</a> <a href="#">Assign to User</a> <a href="#">Refresh</a>					
<input type="checkbox"/>	s ^	State ^	User ID	Owner	Ownership Ty
<input type="checkbox"/>			<a href="#">abrt</a>	<a href="#">Linux System-Accounts</a>	System
<input type="checkbox"/>			<a href="#">adm</a>	<a href="#">Linux System-Accounts</a>	System
<input type="checkbox"/>			<a href="#">avahi</a>	<a href="#">Linux System-Accounts</a>	System
<input type="checkbox"/>			<a href="#">bin</a>	<a href="#">Linux System-Accounts</a>	System
<input type="checkbox"/>			<a href="#">daemon</a>	<a href="#">Linux System-Accounts</a>	System
<input type="checkbox"/>			<a href="#">dbus</a>	<a href="#">Linux System-Accounts</a>	System
<input type="checkbox"/>			<a href="#">ftp</a>	<a href="#">Linux System-Accounts</a>	System
<input type="checkbox"/>			<a href="#">games</a>	<a href="#">Linux System-Accounts</a>	System

## Exercise 7.8 – Modifying the Default Join Directive for an Attribute

**Objective:** Understand attribute join behavior and how conflicts are resolved (Union vs. Intersection).

**PART 1 & 2 – Modify Existing Provisioning Policies to Create Attribute Conflicts**

1. **Edit Admin Linux Accounts Policy:**

- Go to **Entitlements**  $\rightarrow$  **Linux Service**  $\rightarrow$  **Parameters**.

- Create **Parameter 1** (Mandatory groups):
  - Attribute: **Secondary group** (erposixsecondgroup).
  - Enforcement Type: **Mandatory**.
  - Groups: adm, printadmin.

**Manage Provisioning Policies**

**Manage Policies > Manage Provisioning Policies > Define Co**

To define an entitlement parameter for **Secondary group** attribute, select a parameter type, and then provide further information required. When you are done, click Continue.

**Parameter Type**

☒ Constant Value

☐ JavaScript

☐ Null

☐ Regular Expression

**Enforcement Type**

☐ Default

☒ Mandatory

☐ Allowed

☐ Excluded

**Secondary group**

printadmin  
adm

Search...

Delete

Continue Cancel

- Create **Parameter 2** (Allowed groups):
  - Attribute: **Secondary group**.
  - Enforcement Type: **Allowed**.
  - Groups: dialout, games, video.
- Submit and enforce the policy.

## 2. Edit Manager Linux Accounts Policy:

- Repeat the steps above, but use different groups:

- Parameter 1 (Mandatory): printadmin.
  - Parameter 2 (Allowed): dialout, video (do NOT include games).
  - Submit and enforce the policy.
3. Wait for both requests to complete via **Home** \$\rightarrow\$

## View Requests. PART 2 – Create a New User to Observe Join

### Behavior (UNION)

1. Navigate to **Manage Users** \$\rightarrow\$ **Create Person**.
2. Create user **Uma Join** (Preferred User ID: ujoin).
3. Assign the Organizational Role **JKE System Admin** and set the Title to **Manager** (to ensure both policies apply).
4. Submit the user.
5. On the Linux terminal, check the groups assigned to ujoin.
  - **Expected Output (UNION - Default):** The user has all mandatory + allowed groups combined from both policies: printadmin, adm, dialout, games, video.

Manage Provisioning Policies

Manage Policies > Manage Provisioning Policies > Entitlement Parameter

Select one or more provisioning parameters that you want to change and click Change, or select Create to view a list of attributes from which you can select to add a new attribute. To remove an attribute, select the attribute, and then click Delete.

CreateChangeDelete

Select ^	Name ^	Template value ^	Enforcement... ^	Value Type ^
<input type="checkbox"/>	UNIX shell	/bin/ksh	Mandatory	Constant Value
<input type="checkbox"/>	Secondary group	printadmin	Mandatory	Constant Value
<input type="checkbox"/>	Secondary group	video	Allowed	Constant Value
<input type="checkbox"/>	Secondary group	dialout	Allowed	Constant Value

Page 1 of 1Total: 4 Displayed: 4 Selected: 0

ContinueCancel



## **PART 3 & 4 – Change Join Directive to INTERSECTION**

1. Navigate to **Configure System**  $\rightarrow$  **Configure Policy Join Behaviors**.
2. Open the configuration using **Java Webstart**.
3. Select **Service Type: PosixLinuxProfile**.

4. From the attribute list, select: erposixsecondgroup (**Secondary group**).
5. Change **Join Type** to **Intersection**.
6. Click **Save** and close the window.
7. **Restart ISIM Server** (required to apply the change).

## Requests

To view the details for a request, click the request type.

**11** requests were submitted by **ITIM Manager** between **November 21, 2025** and **November 21, 2025**.

Cancel Request		Refresh			
<input type="checkbox"/> Selec ^	Status ^	Request Type ^	Date Submitted ^	Requestor ^	Requested
	<input checked="" type="checkbox"/> Success	<a href="#">Modify Provisioning Policy</a>	November 21, 2025 8:55:29 AM	<a href="#">System Administrator</a>	
	<input checked="" type="checkbox"/> Success	<a href="#">Modify Provisioning Policy</a>	November 21, 2025 8:50:51 AM	<a href="#">System Administrator</a>	
	<input checked="" type="checkbox"/> Success	<a href="#">Multi Account Adopt</a>	November 21, 2025 8:40:58 AM	<a href="#">System Administrator</a>	
	<input checked="" type="checkbox"/> Success	<a href="#">Multi Account Adopt</a>	November 21, 2025 8:30:26 AM	<a href="#">System Administrator</a>	

## PART 4 – Create Another User to See New Behavior (INTERSECTION)

1. Navigate to **Manage Users** \$\rightarrow\$ **Create Person**.
2. Create user **Ima Join** (Preferred User ID: ijoin).
3. Assign the Organizational Role **JKE System Admin** and set the Title to **Manager**.
4. Submit the user.
5. On the Linux terminal, check the groups assigned to ijoin.
  - o **Expected Output (INTERSECTION):** Only the group common to the Mandatory lists of *both* policies: printadmin.

## PART 5 – Revert Join Behavior Back to UNION

1. Navigate to **Configure System** \$\rightarrow\$ **Configure Policy Join Behaviors**.
2. Open the configuration via Java Webstart.
3. Select **Service Type: PosixLinuxProfile**.
4. Select attribute: erposixsecondgroup.
5. Change **Join Type** back to **Union**.

6. Click **Save** and close the window.
7. **Restart ISIM Server** again.

## Manage Users > Select a User

To locate a user that you want to manage, type information about the user in the field, select a filter, and then click Search. The users that match your criteria are displayed in the table below. By default, clicking Search will search the system based on the beginning letters of the item you are searching for. To search for a textual pattern in the middle of an item, use the "\*" symbol on the keyboard to indicate a wildcard. (For example, typing \*b\* will find "abc".)

Search information

uma

Search by

Full name



Search

Advanced..

### Users

To perform a particular task for a user, click the icon next to the name of the user, and then select the task you want to perform.

1 results found for: **uma**

☐ Include individual accounts when suspending, restoring, or deleting users

<a href="#">Create</a>	<a href="#">Change</a>	<a href="#">Delete</a>	<a href="#">Suspend</a>	<a href="#">Restore</a>	<a href="#">Transfer</a>	<a href="#">Refresh</a>
<input type="checkbox"/> <b>Select</b> ^	<b>Name</b> ^	<b>E-mail Ad...</b> ^	<b>Last Name</b> ^	<b>Business ...</b> ^	<b>Status</b>	
<input type="checkbox"/>	<a href="#">Uma Join</a>	ujoin@jke.test	Join	<a href="#">JK Enterprises</a>	Active	
Page 1 of 1		Total: 1 Displayed: 1 Selected: 0				

### Policy Join Behavior

Service Type: **PosixLinuxProfile**

Attribute Name	Label	Join Directive
erposixderauthno...	Create home dire...	OR
erposixdupuid	Allow duplicate UL...	OR
erposixexpiredate	Account expiratio...	Priority
erposixforcepwdc...	Force a password...	OR
erposixgecos	Gecos (comments)	Priority
erposixhomedir	Home directory	Priority
erposixlastaccess...	Account last acce...	Priority
erposixloginretries	Allowed number o...	Highest
erposixmaxpwdage	Password maximu...	Highest
erposixminpwdage	Password minimu...	Highest
erposixperhomedir	Home directory p...	Priority
erposixpostexec	Post Exec	Priority
erposixpostexecr...	Post Exec Options	Priority
erposixpreexec	Pre Exec	Priority
erposixpreexecru...	Pre Exec Options	Priority
erposixprimarygro...	Primary group	Priority
erposixprivategroup	Do Not Create Us...	OR
erposixpwdmaxage	Maximum number ...	Highest
erposixpwdwarnage	Password warning...	Highest
erposixsecondgro...	Secondary group	Intersection
erposixshell	UNIX shell	Priority
erposixsudoprivile...	sudo privileges	Union
erposixuid	UID number	Priority
erposixumask	UNIX umask	Priority
eruid	User ID	Priority

Please select the row from the table to modify a Join Di

Attribute Name **erposixsecondgroup**

Description

☒ **Union**☐ Intersection☐ PriorityCustom: ☐ Java

Save

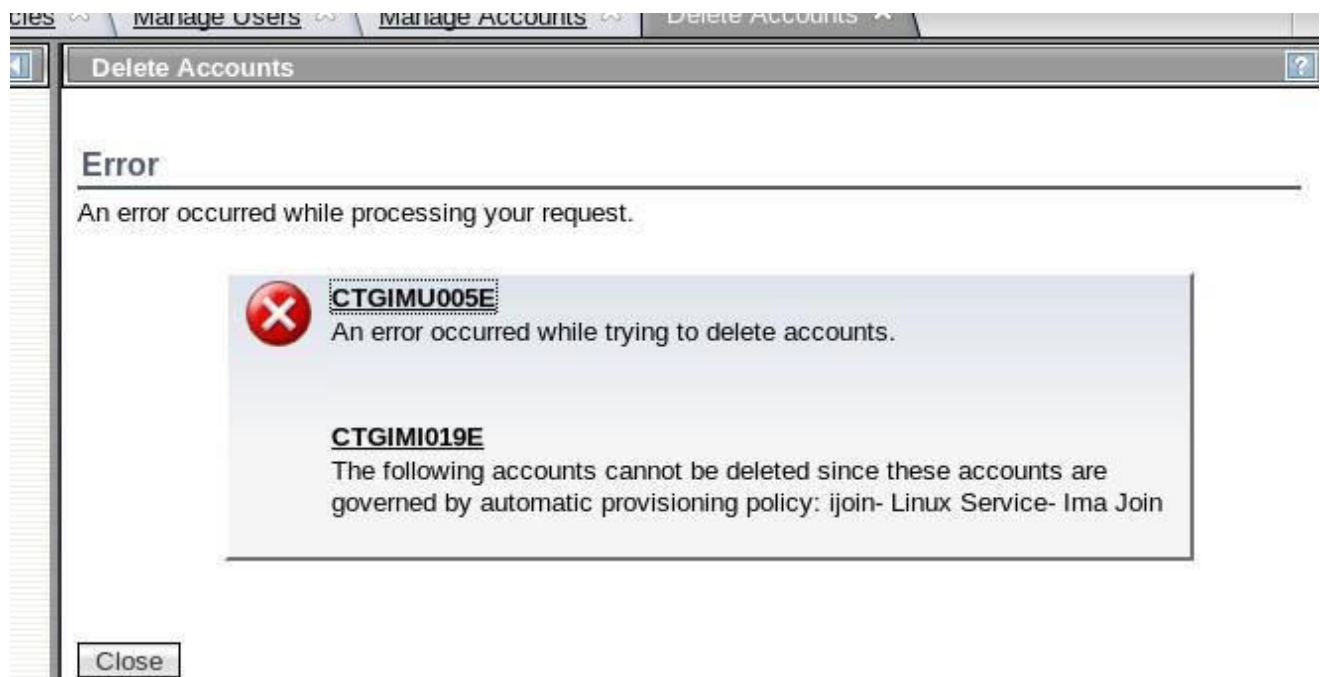
```
ADMU0509I: The server "server1" cannot be reached. It appears to be stopped.
ADMU0211I: Error details may be seen in the file:
/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/server1/stopServer.log
ADMU0116I: Tool information is being logged in file
/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/server1/startServer.log
ADMU0128I: Starting tool with the AppSrv01 profile
ADMU3100I: Reading configuration for server: server1
ADMU3028I: Conflict detected on port 2809. Likely causes: a) An instance of
the server server1 is already running b) some other process is
using port 2809
ADMU3029I: Conflict detected on port 2809 for endpoint
JSR160RMI_CONNECTOR_ADDRESS of the server server1
ADMU3027E: An instance of the server may already be running: server1
ADMU0111E: Program exiting with error:
com.ibm.websphere.management.exception.AdminException: ADMU3027E: An
instance of the server may already be running: server1
ADMU1211I: To obtain a full trace of the failure, use the -trace option.
ADMU0211I: Error details may be seen in the file:
/opt/IBM/WebSphere/AppServer/profiles/AppSrv01/logs/server1/startServer.log
ISIM WAS RESTART COMPLETED
```

## Exercise 7.9 – De-provisioning an Account

**Objective:** Delete Ima Join's Linux

account.

1. Navigate to **Manage Users**  $\rightarrow$  **Ima Join**  $\rightarrow$  **Accounts** tab.
2. Select the Linux account and choose the **Delete** action.
3. Observe the outcome, which depends on the provisioning policy's allowance settings (if deletion is prohibited, allowed, or requires a workflow).



## Exercise 7.10 – Creating a Service Selection Policy

**Objective:** Select the Linux Service automatically based on the last name (M–Z).

1. Navigate to the service selection policy configuration area (location may vary depending on ISIM version).
2. Create a new Service Selection Policy.
3. Define a script or rule that evaluates the user's last name. The script should return the **Linux Service** object for users whose last name begins with a letter from M through Z, and return nothing for A through L.

The screenshot displays the 'Manage Service Selection Policies' web interface. The left sidebar contains a navigation menu with 'General' selected. The main content area is titled 'Manage Policies > Manage Service Selection Policies > General'. It includes a description: 'Type the name of the service selection policy and a brief description. Select a business unit to which the policy applies and the organizational scope of the policy. When you are done, click Submit Now, or Schedule Submission.' The form fields are as follows:

- \*Name:** A text field containing 'Linux Service based on last name'.
- Caption:** An empty text field.
- Description:** A large empty text area.
- Keywords:** An empty text field.
- \*Business unit:** A dropdown menu showing 'JK Enterprises' with a 'Search...' button to its right.
- Make policy available to services in:** Two radio button options: 'This business unit and its subunits' (selected) and 'This business unit only'.
- Status:** Two radio button options: 'Enabled' (selected) and 'Disabled'.

At the bottom of the form are four buttons: 'Submit Now', 'Schedule Submission', 'Test', and 'Cancel'.

Manage Service Selection Policies

\*General

Service Type

\*Service Selection Script

Manage Policies > Manage Service Selection Policies > Service

To select a service, type a selection script below. Click Test to check the script click Submit now or Schedule Submission.

\*Script

```

var service = null;
var serviceArray =
ServiceSearch.searchByFilter("(erServiceName=Linux*)",1);
if (serviceArray != null && serviceArray.length > 0)
service = serviceArray[0];
var sn = subject.getProperty("sn")[0];
if (sn>="M")
return service;
else
return null;

```

Manage Service Selection Policies

## Manage Policies > Manage Service Selection Policies > Success

You successfully submitted the following:

Operation: **Add**

Service Selection Policy Name: **Linux Service based on last name**

Run: **Immediate**.

The Changes might take few minutes to take effect

### Other Tasks

[Manage other service selection policy](#)

[View my request](#)

Close

## Exercise 7.11 – Provisioning Policy Using Service Selection Policy

**Objective:** Provision Linux accounts for users whose last name begins with M–Z.

1. Create a new provisioning policy.



2. Set the policy details as follows:
  - Set **Policy Name** to **M–Z Linux Accounts**.
  - Set **Priority** to **1000**.
  - Set **Members** to **All users**.
3. In **Entitlements Configuration**, set the **Target** to the **Service Selection Policy** created in Exercise 7.10.
4. Submit and enforce the policy.
5. **Result:** Only users with a last name starting M–Z receive Linux accounts.

View All Requests by User

View Requests > View All Requests by User

To locate a user whose requests you want to view, click Search. To view requests for this user, select a date range, and then click Search Requests.

\*User name

System Administrator

Search...

\*Start date

11/21/2025

\*Time

12:00 AM

\*End date

11/21/2025

\*Time

11:59 PM

Search Requests

\*Status

☒ Errors

☒ Warnings

☒ Success

☒ Pending

Requests

To view the details for a request, click the request type.

17 requests were submitted by ITIM Manager between November 21, 2025 and November 21, 2025.

Cancel Request

Refresh

<input type="checkbox"/>	Status	Request Type	Date Submitted	Requestor	Requested
<input checked="" type="checkbox"/>	Success	Add Provisioning Policy	November 21, 2025 9:16:54 PM	System Administrator	

**Objective:** Automatically correct non-compliant accounts.

1. Navigate to the provisioning policy (e.g., *Manager Linux Accounts*) and view the non-compliant accounts (State column).
2. Change the policy's **Enforcement** mode from **Mark** to **Correct**.

The screenshot shows the 'Manage Accounts' window. At the top, it says 'Manage Services > Accounts'. Below this is a search section with a text input field labeled 'Account information' and two radio buttons: 'User ID' (selected) and 'Owner'. To the right, there are two more radio buttons: 'Ownership Type' (selected) and 'Individual'. Below the search section is a table titled 'Accounts'. The table has columns: 'Request...', 'State', 'User ID', 'Owner', and 'Ownership Ty'. The 'State' column contains yellow warning icons. The 'User ID' column contains names like 'libn-s', 'iayom', 'tbraha', etc. The 'Owner' column contains names like 'Ibrahim Ibn-Saud', 'Ivan Ayom', 'Tycho Braha', etc. The 'Ownership Ty' column contains the word 'Individual'. Above the table, there are buttons: 'Request...', 'Change', 'Delete', 'Suspend', 'Restore', 'Assign to User', and 'Refresh'. Below the table, there is a footer area with the text '29 results found for: \*'.

Search by  
☐ User ID  
☒ Owner

Ownership Type  
☒ Individual

Accounts

To perform a particular task on an account, click the icon next to the name of the user ID, and then select the

29 results found for: \*

Request...	State	User ID	Owner	Ownership Ty
<input type="checkbox"/>	⚠	<a href="#">libn-s</a>	<a href="#">Ibrahim Ibn-Saud</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">iayom</a>	<a href="#">Ivan Ayom</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">tbraha</a>	<a href="#">Tycho Braha</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">rsanch</a>	<a href="#">Raphael Sanchez</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">ddrive</a>	<a href="#">Dianne Driver</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">jwrih</a>	<a href="#">John Wright</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">dgoto</a>	<a href="#">Dengo Goto</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">sthoma</a>	<a href="#">Sue Thomas</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">bcarlt</a>	<a href="#">Brad Carlton</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">vyoung</a>	<a href="#">Vince Young</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">eabbot</a>	<a href="#">Edwin Abbott</a>	Individual
<input type="checkbox"/>	⚠	<a href="#">asmyth</a>	<a href="#">Alice Smyth</a>	Individual

3. Submit and enforce the policy.

View All Requests

View Requests > View All Requests

To view your requests, select the time period for the set of requests, and then click Search Requests.

Request type

All

Time Interval

Today

Search Requests

Reset

More Search Criteria

Requests

To view the details for a particular request, click the request type.

21 requests were submitted between November 21, 2025 and November 21, 2025.

Cancel Request

Refresh

<input type="checkbox"/> <div>Selec ^</div>	<div>Status ^</div>	<div>Request Type ^</div>	<div>Date Submitted ^</div>	<div>Requestor ^</div>	<div>Requested</div>
	<input checked="" type="checkbox"/> <div>Success</div>	<a href="#">Change Policy Enforcement Action</a>	<div>November 21, 2025 9:22:03 PM</div>	<a href="#">System Administrator</a>	

- The system will now automatically submit requests to fix all violations (e.g., change the Shell for Douglas Adams to /bin/ksh).
- Verify that the accounts are now compliant.

## Manage Accounts

### Manage Services > Accounts

To locate the accounts for the **Linux Service** service, type a user ID or owner name, and select the corresponding filter. Select an ownership type, then click Search. The accounts that match your criteria are displayed in the table below. By default, clicking Search will search the system based on the beginning letters of the item you are searching for. To search for a textual pattern in the middle of an item, use the '\*' symbol on the keyboard to indicate a wildcard. (For example, typing \*b\* will find "abc".)

Account information

Search  
by



User ID



Owner

Ownership Type

All

### Accounts

To perform a particular task on an account, click the icon next to the name of the user ID, and then select the

78 results found for: \*

Request...	Change	Delete	Suspend	Restore	Assign to User	Refresh
<input type="checkbox"/> S ^	State ▾	User ID ^	Owner ^	Ownership Ty		
<input type="checkbox"/>		<a href="#">abrt</a>	▶ <a href="#">Linux System-Accounts</a>	System		
<input type="checkbox"/>		<a href="#">adm</a>	▶ <a href="#">Linux System-Accounts</a>	System		
<input type="checkbox"/>		<a href="#">asmyth</a>	▶ <a href="#">Alice Smyth</a>	Individual		
<input type="checkbox"/>		<a href="#">avahi</a>	▶ <a href="#">Linux System-Accounts</a>	System		
<input type="checkbox"/>		<a href="#">bcarlt</a>	▶ <a href="#">Brad Carlton</a>	Individual		
<input type="checkbox"/>		<a href="#">bin</a>	▶ <a href="#">Linux System-Accounts</a>	System		
<input type="checkbox"/>		<a href="#">bmidla</a>	▶ <a href="#">Brent Midland</a>	Individual		
<input type="checkbox"/>		<a href="#">bsmith</a>	▶ <a href="#">Bob Smith</a>	Individual		
<input type="checkbox"/>		<a href="#">bweir</a>	▶ <a href="#">Robert Weir</a>	Individual		
<input type="checkbox"/>		<a href="#">chrony</a>	▶ None	None		
<input type="checkbox"/>		<a href="#">colord</a>	▶ None	None		

6. Revert the **Enforcement** mode back to **Mark**.

Configure Policy Enforcement Behavior

Manage Services > Configure Policy Enforcement Behavior > Select Action

To resolve non-compliant accounts on the **Linux Service** service, select an enforcement action below.

Enforcement Action

☒ Mark

☐ Suspend

☐ Correct

☐ Alert

☐ Use Global Enforcement Action: Mark

### Exercise 7.13 – Provisioning Access on Linux

**Objective:** Create and request an application access (Tetris) based on a Linux group.

1. Navigate to the Linux Service  $\rightarrow$  **Manage Groups**.
2. Select the games group  $\rightarrow$  **Define Access**.
3. Enable **Common Access** and set the **Name** to **Tetris**.
4. Login as the user asmith (Alice Smyth).
5. Navigate to the **Request Access** screen.

Manage Groups

Access status

☐ Enable Access

☒ Enable Common Access

☐ Disable Access

\*Access name

Tetris

Access type for this group

▼ Change access type

To change the access type, expand the tree and select the access type. To leave the access type unchanged, collapse the tree to the root node.

[-] Access Types

- [+] Application
- [+] E-mail group
- [+] Role
- [+] Shared folder

Access description

Access owner

Search... Clear

Approval workflow

No Approval Required ▼

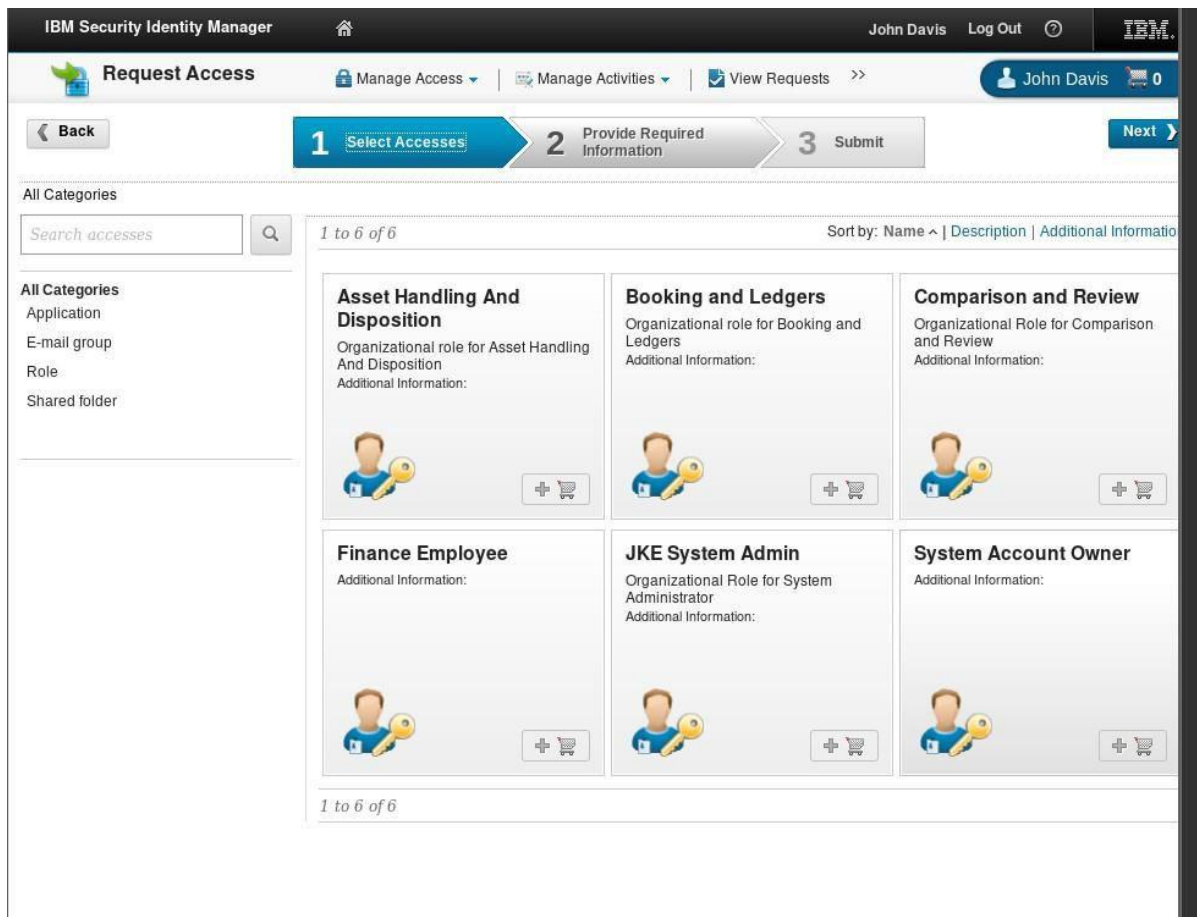
☒ Notify users when access is provisioned and available for use

☒ Notify users when access is de-provisioned

Access icon

6. Request the **Tetris** access and **Submit**.
7. *Verification:* Confirm asmith is added to the games group on Linux.
8. Login as user jdavis.

9. Navigate to **Request Access** and confirm that the **Tetris** access is **not visible** (as jdavis is not entitled by policy).



## Exercise 7.14 – Provisioning Shared Folder Access

**on LDAP Objective:** Provide LDAP-based shared directory access.

1. Modify the provisioning policy for the **TechSupport LDAP** service.
2. Set entitlement parameters for the LDAP service:
  - Set **Group Name** to **JKENetworkShare**.
  - Use JavaScript for mapping attributes like Full Name, Last Name, and User ID.
3. Define Access for the JKENetworkShare group: **TechSupport Shared Directory**.



**Manage Policies > Manage Provisioning Policies > Entitlement Parameter**

Select one or more provisioning parameters that you want to change and click Change, or select Create to view a list of attributes from which you can select to add a new attribute. To remove an attribute, select the attribute, and then click Delete.

<div>CreateChangeDelete</div>				
<input type="checkbox"/> Select ^	Name ^	Template value ^	Enforcement... ^	Value Type ^
<input type="checkbox"/>	<u>Group Name</u>	cn=JKENetworkShare,ou...	Allowed	Constant Value
<input type="checkbox"/>	<u>Full name</u>	return subject.getProperty("cn");	Mandatory	JavaScript
<input type="checkbox"/>	<u>Last name</u>	return subject.getPropert("sn");	Mandatory	JavaScript
<input type="checkbox"/>	<u>User ID</u>	return subject.getPropert("uid");	Mandatory	JavaScript
Page 1 of 1		Total: 4 Displayed: 4 Selected: 0		

IBM Security Identity Manager

John DavisLog Out

IBM

Request Access

Manage AccessManage ActivitiesView Requests

John Davis1

Back

1 Select Accesses

2 Provide Required Information

3 Submit

Submit

## Provide Required Information

Provide information to complete your request.

1

Justification for this request:

Required

2

A new account on **TechSupport LDAP** is required for the following accesses: **TechSupport Shared Directory**.

Provide Account Information

IBM Security Identity Manager

John DavisLog Out

IBM

View Requests

Manage AccessManage ActivitiesView RequestsManage Profiles

Batch Request for: John Davis - Pending

Request New Access

Request number: 2835224753290047415

Submitted for: John Davis

Submitted by: John Davis

Submitted date: Nov 21, 2025, 10:26:42 PM

### Request Details

Add Pending

TechSupport Shared Directory

View Changes

### Information Provided with the Request

Justification for this request:

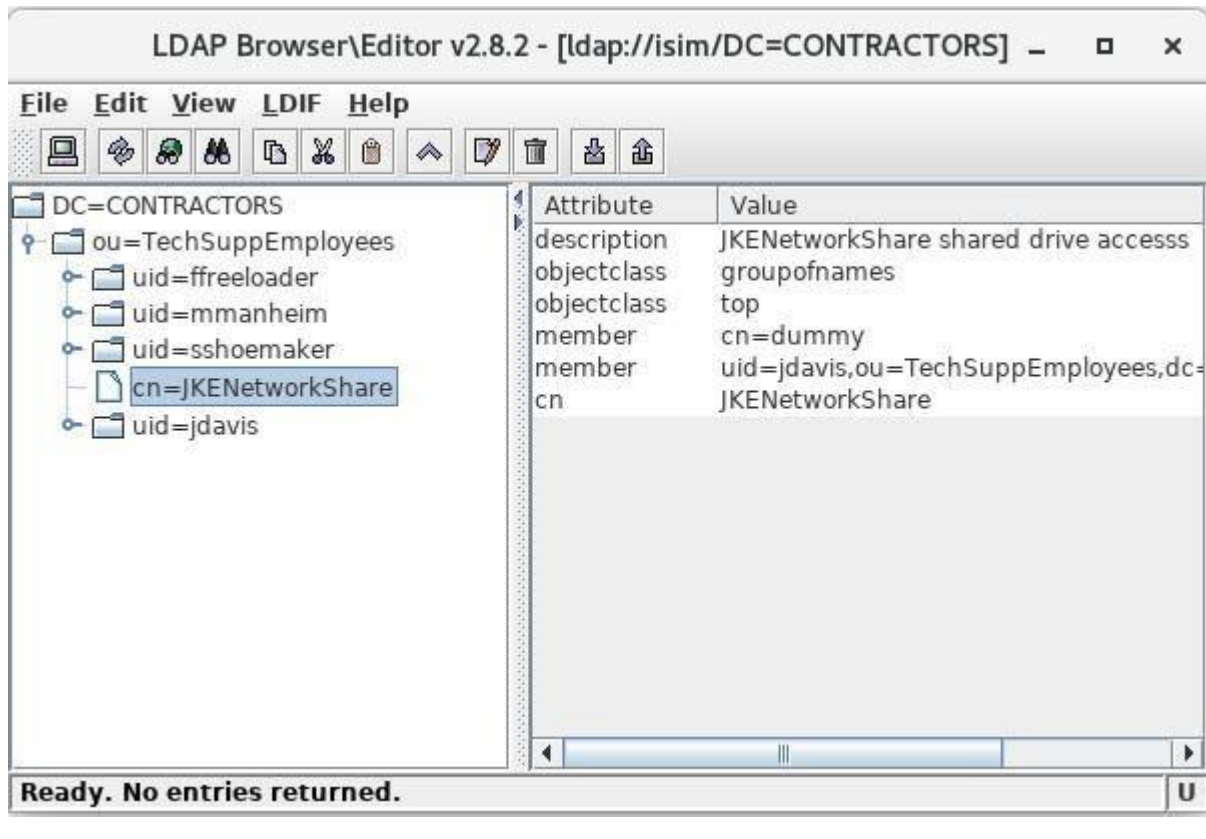
Required

View Details

4. Login as user jdavis.

5. Navigate to **Request Access** and request the **TechSupport Shared Directory** access.

6. ISIM will automatically provision an LDAP account (if necessary) and grant access by adding jdavis to the JKENetworkShare group.
7. Confirm the user and group membership in an **LDAP Browser**.



## Conclusion

The exercises successfully demonstrated the configuration and verification of provisioning policies for Linux and LDAP services, implementation of identity, password, adoption, and service selection policies, and verification of provisioning, compliance, and access request workflows to achieve full lifecycle governance in ISIM.