

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**

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
asmthy

First name
Alice

Initials

Home address

Shared secret

Organizational roles

JKE System Admin
Asset Handling And Disposition
Booking and Ledgers
ITIM Administrators

Add

Search...

Delete

Submit Now Schedule Submission Cancel

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

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
Adams

*Full name
Douglas Adams

*Preferred user ID
dadams

First name
Douglas

Initials

Home address

Shared secret

Organizational roles

JKE System Admin
JKE Managers

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

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

Abbott

*Full name

Edwin Abbott

*Preferred user ID

eabbott

First name

Edwin

Initials

Home address

Shared secret

Organizational roles

Add

JKE System Admin
JKE Managers

Search...

Delete

[Submit Now](#)

[Schedule Submission](#)

[Cancel](#)

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

*Personal Information <ul style="list-style-type: none"> Business Information Contact Information Assignment Attributes 	<p>Manage Users > Change User > Personal Information</p> <p>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.</p> <p>*Last name System-Accounts</p> <p>*Full name Linux System-Accounts</p> <p>*Preferred user ID linuxsystemaccounts</p> <p>First name Linux</p> <p>Initials </p> <p>Home address </p> <p>Shared secret </p> <p>Organizational roles</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;"> ITIM Administrators JKE System Admin System Account Owner <div style="float: right; margin-right: 10px;"> Add Search... Delete </div> </div> <p>Submit Now Schedule Submission Cancel</p>
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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**.

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

Manage Provisioning Policies

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.

<ul style="list-style-type: none"> *<u>General</u> *<u>Members</u> *<u>Entitlements</u> 	<p>*Policy name Admin Linux Accounts</p> <p>Caption <input type="text"/></p> <p>Make policy available to services in <input checked="" type="radio"/> This business unit and its subunits <input type="radio"/> This business unit only</p> <p>Description Created during service creation</p> <p>Policy status <input checked="" type="radio"/> Enable <input type="radio"/> Disable</p> <p>*Priority (integer greater than 0) 100</p> <p>Keywords <input type="text"/></p> <p>*Business unit JK Enterprises <input type="button" value="Search..."/></p>
<input type="button" value="Submit"/> <input type="button" value="Preview..."/> <input type="button" value="Save as Draft"/> <input type="button" value="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

Provisioning Policy Preview

Manage Policies > Manage Provisioning Policies > Preview New Accounts

Use this page to view the new accounts that will be created if the provisioning policy is submitted. To view the details of an account, select the userID that you want to view, and then click View.

Select	User ID	Service Name	Owner	Status
<input checked="" type="radio"/>	asmyth	Linux Service	Alice Smyth	Active
<input type="radio"/>	dadams	Linux Service	Douglas Adams	Active
<input type="radio"/>	eabbot	Linux Service	Edwin Abbott	Active
<input type="radio"/>	ecarr	Linux Service	Erica Carr	Active

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

Close

Exercise 7.3 – Verifying Linux Account

Provisioning Objective: Review requests and confirm accounts on Linux.

1. Navigate to Home \$\rightarrow\$ View Requests \$\rightarrow\$ 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.

Process Details	
View the details of the requests that were submitted by Workflow Sys	
Request type	Request ID
Account Add	2615600853427091
Completion status	Service Name
Success	Linux Service
Date submitted	Date scheduled
November 21, 2025 at 8:14:27 AM	November 21, 2025
Date started	Last modified
November 21, 2025 at 8:14:27 AM	November 21, 2025
Date completed	
November 21, 2025 at 8:14:35 AM	
Requested for	
Douglas Adams	

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 \$\rightarrow\$ Manage Users \$\rightarrow\$ 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
ITIM Service	asmith
Linux Service	asmyth

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:
 - o Set **Policy Name** to **Manager Linux Accounts**.
 - o Set **Status** to **Enabled**.
 - o Set **Priority** to **50**.
 - o Set **Members** to the organizational role **JKE Managers**.

Manage Provisioning Policies

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

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

Manage Provisioning Policies

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

Add	Remove	Name	Description	Business unit
<input type="checkbox"/>	Select ^	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:

- o Set **Attribute to Shell**.
- o Set **Enforcement Type** to **Mandatory**.
- o Set **Value** to **/bin/ksh**.

Manage Provisioning Policies

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

Workflow

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).



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**).

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:
 - o Set **Policy Name** to **System Linux Accounts**.
 - o Set **Priority** to **10000**.
 - o Set **Members** to the organizational role **System Account Owner**.
 - o Set **Ownership Type** to **System**.
 - o Set **Provisioning** to **Manual**.

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

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

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".)

Search by
 User ID
 Owner

Ownership Type
 All

Account information

Accounts

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

44 results found for: *

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



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		User ID	Ownership Type
linux		<input checked="" type="radio"/> Owner	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**

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

- o 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 par type, and then provide further information required. When you are done, click C

Parameter Type
 Constant Value
 JavaScript
 Null
 Regular Expression

Enforcement Type
 Default
 Mandatory
 Allowed
 Excluded

Secondary group

- 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.

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 1 | Total: 4 Displayed: 4 Selected: 0

Continue Cancel

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**.

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

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

?

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 Search by

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

<input type="button" value="Create"/>	<input type="button" value="Change"/>	<input type="button" value="Delete"/>	<input type="button" value="Suspend"/>	<input type="button" value="Restore"/>	<input type="button" value="Transfer"/>	<input type="button" value="Refresh"/>			
<input type="checkbox"/> Select	Name	<input type="button" value="▲"/>	E-mail Ad...	<input type="button" value="▲"/>	Last Name	<input type="button" value="▲"/>	Business ...	<input type="button" value="▲"/>	Status
	<input type="checkbox"/> Uma Join		▶ ujoin@jke.test		Join		JK Enterprises		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
erposixforcepwdch...	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
erposixpreeexec	Pre Exec	Priority
erposixpreeexecru...	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 Directive

Attribute Name: erposixsecondgroup
Description:
 Union Intersection Priority
Custom : Java

```
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).

Delete Accounts



Error

An error occurred while processing your request.



CTGIMU005E

An error occurred while trying to delete accounts.

CTGIMI019E

The following accounts cannot be deleted since these accounts are governed by automatic provisioning policy: ijoin- Linux Service- Ima Join

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 shows a software interface titled "Manage Service Selection Policies". The main title bar includes tabs for "Manage Policies", "Manage Service Selection Policies", and "General". The left sidebar has sections for "General", "Service Type", and "Service Selection Script". The right panel displays the "General" configuration screen with the following fields:

- Name:** Linux Service based on last name
- Caption:** (empty)
- Description:** (empty)
- Keywords:** (empty)
- Business unit:** JK Enterprises
- Make policy available to services in:**
 - This business unit and its subunits
 - This business unit only
- Status:**
 - Enabled
 - Disabled

At the bottom are buttons for "Submit Now", "Schedule Submission", "Test", and "Cancel".

Manage Service Selection Policies

***General**

Service Type

***Service Selection Script**

Manage Policies > Manage Service Selection Policies > Service Selection Script

To select a service, type a selection script below. Click Test to check the script or 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:
 - o Set **Policy Name** to M-Z Linux Accounts.
 - o Set **Priority** to 1000.
 - o 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

*Start date
11/21/2025 *Time
12:00 AM

*End date
11/21/2025 *Time
11:59 PM

*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**.

<input type="button" value="Cancel Request"/>	<input type="button" value="Refresh"/>	Status	Request Type	Date Submitted	Requestor	Requested
<input type="checkbox"/>	Select	<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 Services > Accounts' screen. At the top, there is a search bar labeled 'Search by' with options 'User ID' and 'Owner' (which is selected). Below the search bar is a section titled 'Account information' with a text input field. To the right of the search bar is a 'Ownership Type' section with a radio button for 'Individual' (which is selected) and another for 'Group'. The main area is titled 'Accounts' and displays a table of 29 results found for an asterisk wildcard. The table has columns for 'Request...', 'Change', 'Delete', 'Suspend', 'Restore', 'Assign to User', and 'Refresh'. The 'State' column contains yellow warning icons for most accounts. The 'User ID' column lists account names like 'iibn-s', 'iayom', 'tbraha', etc. The 'Owner' column lists names like 'Ibrahim Ibn-Saud', 'Ivan Ayom', 'Tycho Braha', etc. The 'Ownership Type' column shows all entries as 'Individual'. A scroll bar is visible on the right side of the table.

User ID	Owner	Ownership Type
iibn-s	Ibrahim Ibn-Saud	Individual
iayom	Ivan Ayom	Individual
tbraha	Tycho Braha	Individual
rsanch	Raphael Sanchez	Individual
ddrive	Dianne Driver	Individual
jwright	John Wright	Individual
dgoto	Dengo Goto	Individual
ssthoma	Sue Thomas	Individual
bcarlt	Brad Carlton	Individual
vyoung	Vince Young	Individual
eabbot	Edwin Abbott	Individual
asmthy	Alice Smyth	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.

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

4. The system will now automatically submit requests to fix all violations (e.g., change the Shell for Douglas Adams to /bin/ksh).
5. 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".)

Search by
 User ID
 Owner

Ownership Type
All

Account information

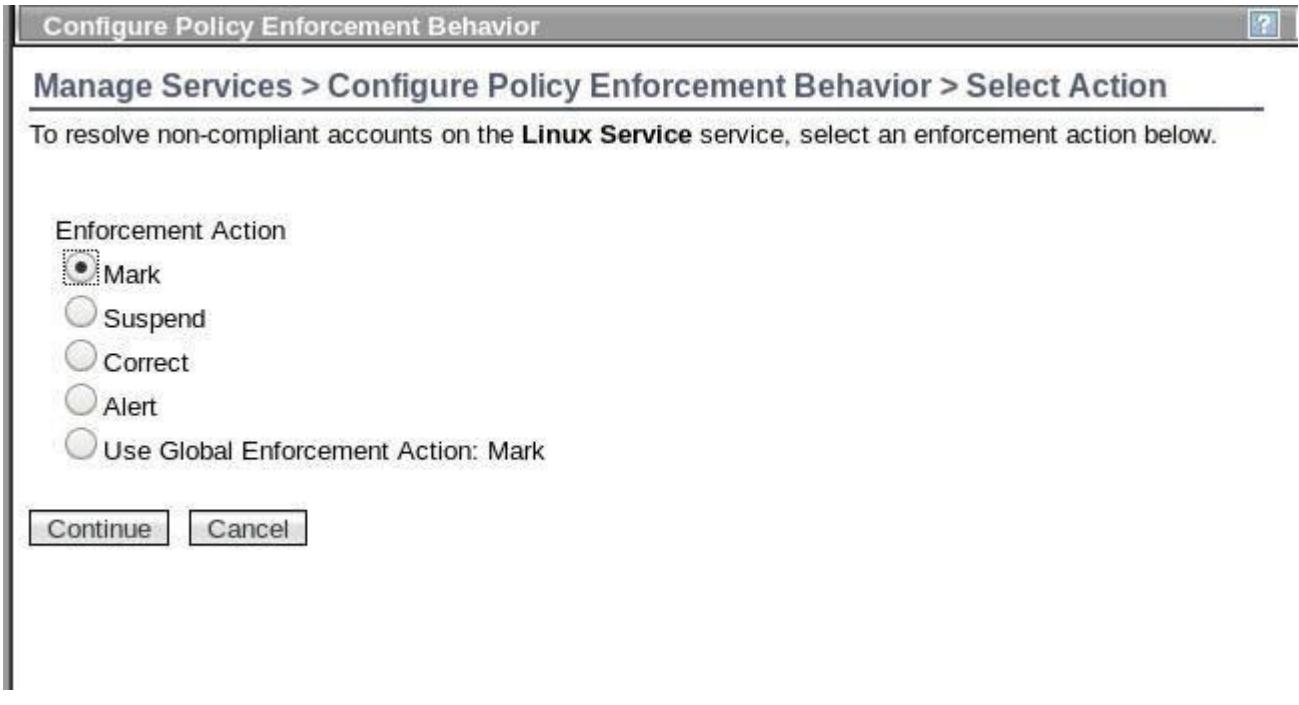
Accounts

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
	S	State	User ID	Owner		Ownership Ty	
<input type="checkbox"/>			abrt	▶ Linux System-Accounts		System	
<input type="checkbox"/>			adm	▶ Linux System-Accounts		System	
<input type="checkbox"/>			asmyth	▶ Alice Smyth		Individual	
<input type="checkbox"/>			avahi	▶ Linux System-Accounts		System	
<input type="checkbox"/>			bcarlt	▶ Brad Carlton		Individual	
<input type="checkbox"/>			bin	▶ Linux System-Accounts		System	
<input type="checkbox"/>			bmidla	▶ Brent Midland		Individual	
<input type="checkbox"/>			bsmith	▶ Bob Smith		Individual	
<input type="checkbox"/>			bweir	▶ Robert Weir		Individual	
<input type="checkbox"/>			chrony	▶ None		None	
<input type="checkbox"/>			colord	▶ None		None	
...		

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

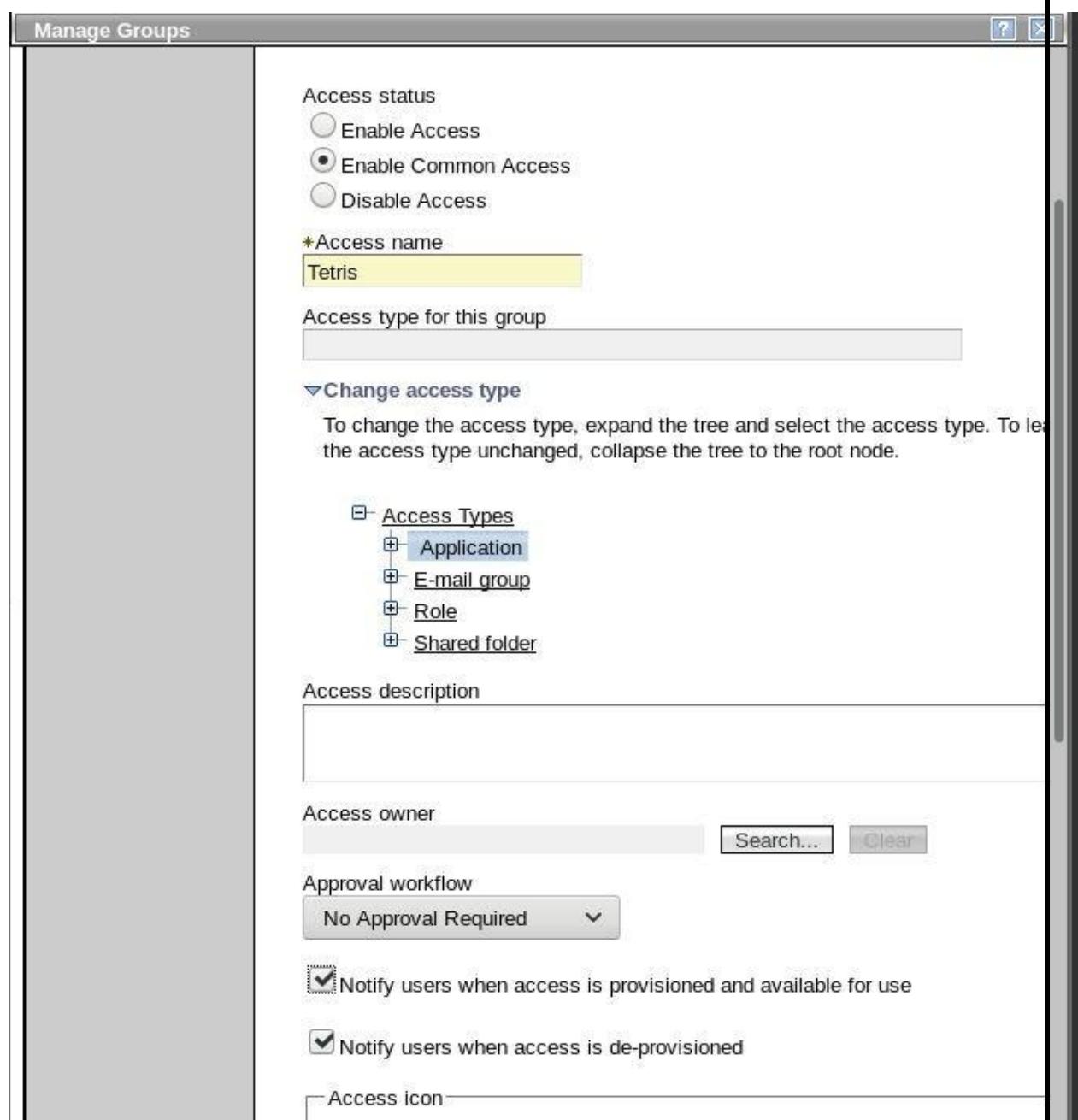
Access description

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



This screenshot shows the 'Manage Groups' interface. On the left is a large gray sidebar. The main area contains several configuration fields. At the top right are standard window controls. The 'Access status' section has three radio buttons: 'Enable Access' (unselected), 'Enable Common Access' (selected), and 'Disable Access' (unselected). Below that is a field labeled '*Access name' containing the value 'Tetris', which is highlighted with a yellow background. A large, empty text input field follows. Underneath is a section titled '▼Change access type' with a descriptive note about expanding or collapsing a tree view. A hierarchical tree view is shown under 'Access Types' with four items: 'Application' (selected and highlighted with a blue background), 'E-mail group', 'Role', and 'Shared folder'. Below this is an 'Access description' field with an empty text area. Further down are 'Access owner' search and clear buttons. An 'Approval workflow' dropdown menu is set to 'No Approval Required'. At the bottom are two checked checkboxes for notification: 'Notify users when access is provisioned and available for use' and 'Notify users when access is de-provisioned'. Finally, there is an 'Access icon' field with a small placeholder 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).

The screenshot shows the 'Request Access' interface in IBM Security Identity Manager. The user is at Step 1: Select Accesses. There are six categories listed on the left: All Categories, Application, E-mail group, Role, and Shared folder. The main area displays six organizational roles in a grid:

Role	Description	Icon	Action Buttons
Asset Handling And Disposition	Organizational role for Asset Handling And Disposition Additional Information:		[+]
Booking and Ledgers	Organizational role for Booking and Ledgers Additional Information:		[+]
Comparison and Review	Organizational Role for Comparison and Review Additional Information:		[+]
Finance Employee	Additional Information:		[+]
JKE System Admin	Organizational Role for System Administrator Additional Information:		[+]
System Account Owner	Additional Information:		[+]

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:
 - o Set **Group Name** to **JKENetworkShare**.
 - o Use JavaScript for mapping attributes like Full Name, Last Name, and User ID.
3. Define Access for the **JKENetworkShare** group: **TechSupport Shared Directory**.

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.

<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.getProperty("sn");	Mandatory	JavaScript
<input type="checkbox"/>	<u>User ID</u>	return subject.getProperty("uid");	Mandatory	JavaScript

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

IBM Security Identity Manager John Davis Log Out IBM.

Request Access Manage Access | Manage Activities | View Requests >

John Davis 1

Back 1 Select Accesses 2 Provide Required Information 3 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 Davis Log Out IBM.

View Requests Manage Access | Manage Activities | View Requests | Manage Profiles >

Batch Request for: John Davis - Pending

Request number: 2835224753290047415 Submitted for: John Davis
Submitted by: John Davis Submitted date: Nov 21, 2025, 10:26:42 PM

Request Details

+ TechSupport Shared Directory
Add Pending View Changes

Information Provided with the Request

Justification for this request:
Required

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**.

Attribute	Value
description	JKENetworkShare shared drive accesss
objectclass	groupofnames
objectclass	top
member	cn=dummy
member	uid=jdavis,ou=TechSuppEmployees,dc=JKENetworkShare
cn	JKENetworkShare

Ready. No entries returned.

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.