

# AD Integration flows -

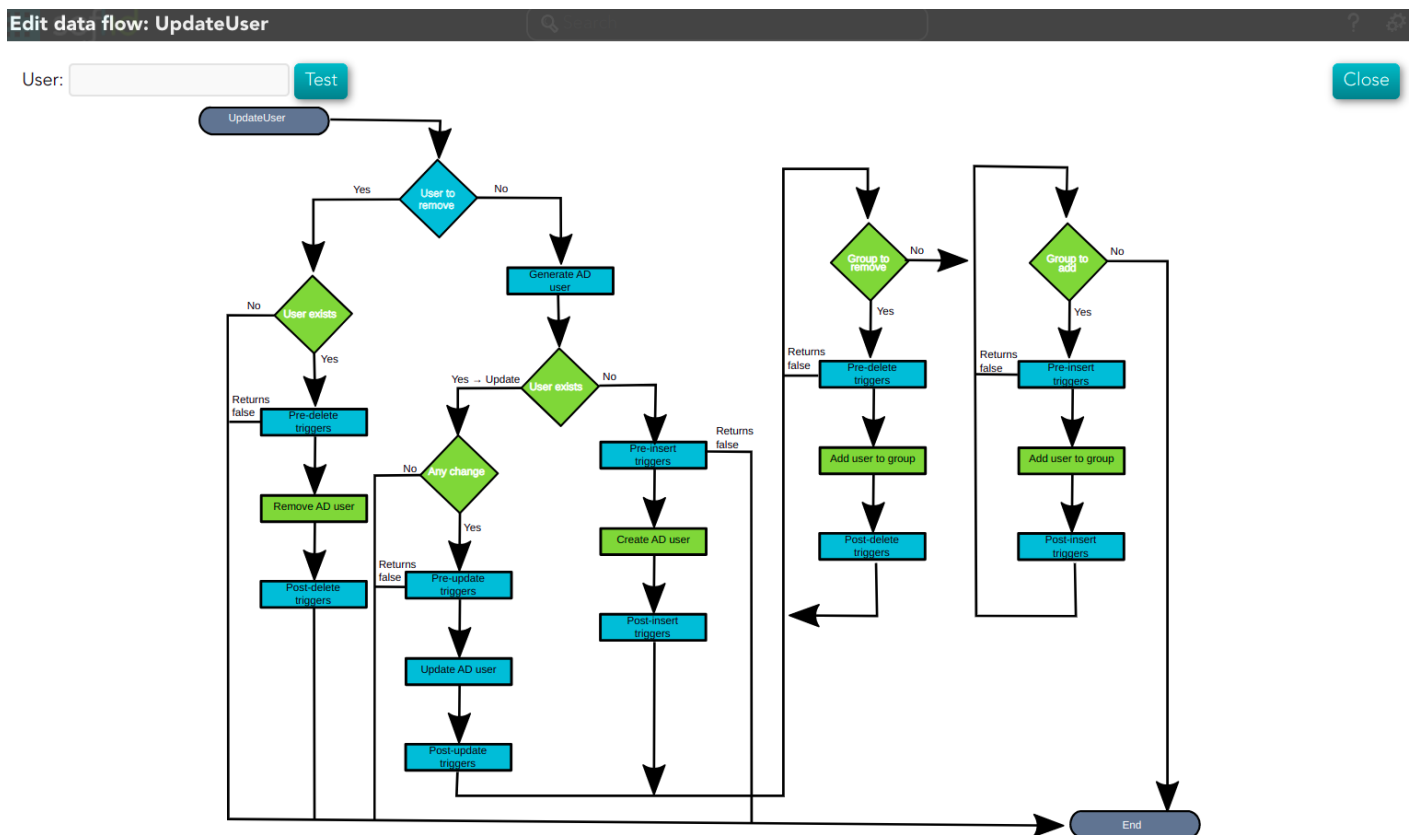
## Update user

## Update

## Introduction

Soffid provides a workflow to modify and/or delete a user in the final system. In it, we can see each of the steps of which this process is composed.

## Diagram



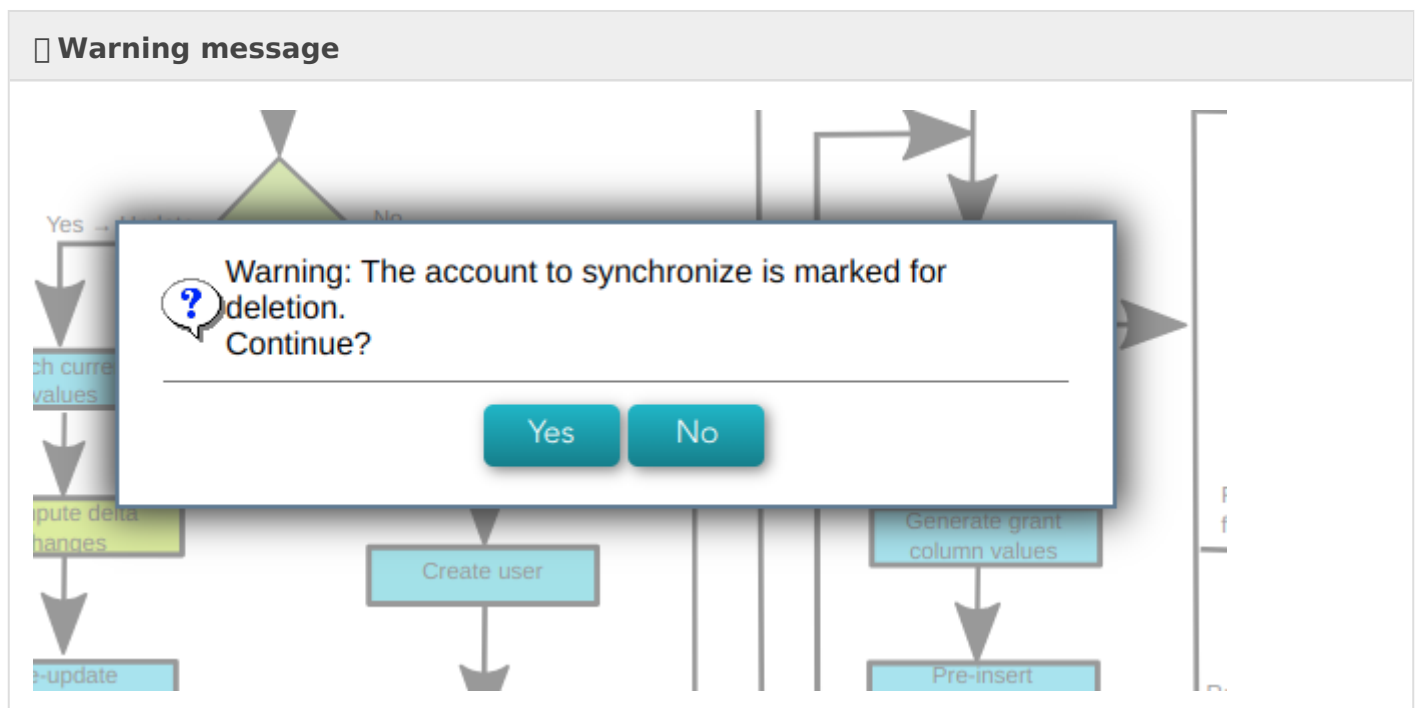
# Step by Step

In this document, we will explain the process that Soffid performs to modify a user for the AD connector.

## 1. Initial step

First of all, Soffid checks if the user exists in Soffid and then checks the operation to perform, update or delete.

**1.1.** If the **user does not exist in Soffid**, then Soffid asks to delete the user in the target System.



**1.1.1. Yes:** If the answer is Yes, the process follows through the Yes branch, [3. Delete branch].

**1.1.2. No:** If the answer is Yes, the process finishes [10. End].

**1.2.** If the **user exists in Soffid**, the process continues through [2. User to remove?] to check if the

## 2. User to remove?

**By clicking on the User to remove? step,...**

You can configure all the properties related to the user object for this step

### MappingProperties

System objects

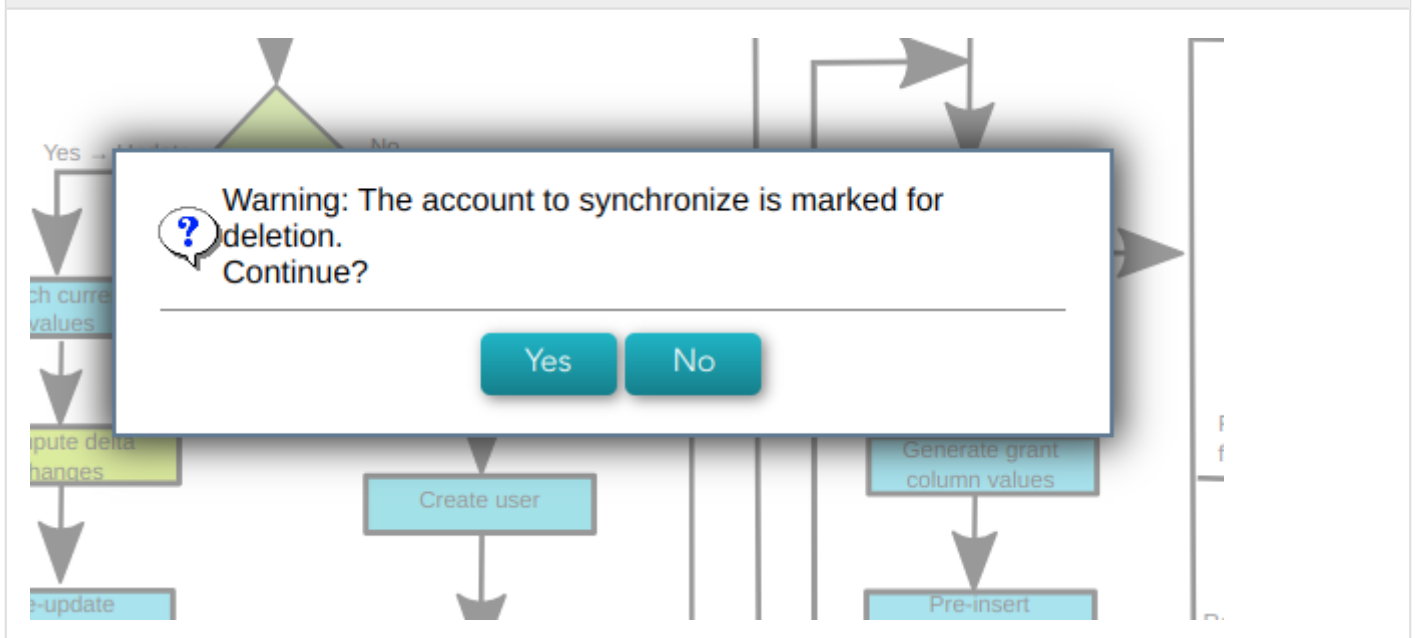
user

based on user

Property	Value	
createDisabledAccounts	false	

**2.1.** If the user is **marked for Deletion**, Soffid will ask for user consent to continue with the process or to cancel it. If the answer is Yes, the process follows through the Yes branch, [\[3. Delete branch\]](#).

### Warning message



**2.2.** If the user is **marked for Update**, it continues with the flow following through the No branch, [\[4. Insert or Update branch\]](#).

## 3. Delete branch

### Diagram

```

graph TD
    Start([Start]) --> UpdateUser([Update User])
    UpdateUser --> UserToRemove{User to remove}
    UserToRemove -- Yes --> UserExists1{User exists}
    UserExists1 -- No --> PreDelete1[Pre-delete triggers]
    PreDelete1 -- Returns false --> RemoveADUser[Remove AD user]
    RemoveADUser --> PostDelete1[Post-delete triggers]
    PostDelete1 --> End([End])
    UserExists1 -- Yes --> PreDelete1
    UserToRemove -- No --> GenerateADUser[Generate AD user]
    GenerateADUser --> UserExists2{User exists}
    UserExists2 -- No --> PreInsert[Pre-insert triggers]
    PreInsert -- Returns false --> CreateADUser[Create AD user]
    CreateADUser --> PostInsert[Post-insert triggers]
    PostInsert --> End
    UserExists2 -- Yes --> Update{Any change}
    Update -- No --> PreUpdate[Pre-update triggers]
    PreUpdate -- Returns false --> UpdateADUser[Update AD user]
    UpdateADUser --> PostUpdate[Post-update triggers]
    PostUpdate --> End
    Update -- Yes --> PreUpdate
    PreDelete1 -- Returns false --> GroupToRemove{Group to remove}
    PreInsert -- Returns false --> GroupToRemove
    PreUpdate -- Returns false --> GroupToAdd{Group to add}
    PostDelete1 --> GroupToRemove
    PostInsert --> GroupToAdd
    GroupToRemove -- No --> End
    GroupToRemove -- Yes --> PreDelete2[Pre-delete triggers]
    PreDelete2 -- Returns false --> AddUserToGroup1[Add user to group]
    AddUserToGroup1 --> PostDelete2[Post-delete triggers]
    PostDelete2 --> End
    GroupToAdd -- No --> End
    GroupToAdd -- Yes --> PreInsert2[Pre-insert triggers]
    PreInsert2 -- Returns false --> AddUserToGroup2[Add user to group]
    AddUserToGroup2 --> PostInsert2[Post-insert triggers]
    PostInsert2 --> End
  
```

The flowchart illustrates the User Management Process, starting with 'Update User' and ending at 'End'. The process is divided into three main sections: User Removal, User Addition, and User Update. Each section includes pre-triggers, core actions, and post-triggers, with decision points for 'User exists' and 'Any change'. The process also includes a 'Group to remove' and 'Group to add' decision point, which leads to 'Pre-delete triggers' and 'Pre-insert triggers' respectively, and then to 'Add user to group' and 'Post-delete triggers' or 'Post-insert triggers'.





You can configure all the pre-delete triggers related to the user object for this step.

#### Output triggers

System objects

USERS

based on user

Trigger	Script		+
preDelete	userName = source("userName"); attributes = serviceLocator.getUserService().findUserAttributes(userName);		
preDelete	return true;		

**3.1.3. Soffid removes the AD user** in the Active directory.

**3.1.3.** Then Soffid executes the **post-delete triggers** if any. These triggers can be used to perform a specific action just after performing the remove user operation on the target object.

#### By clicking on the Post-delete triggers step,...

You can configure the post-delete triggers related to the user object for this step.

#### Output triggers

System objects

user

based on user

Trigger	Script		+
postDelete			

**3.1.3.** Then the process finishes [10. End].

## 4. Insert or Update branch

**4.1.** When the operation to perform is to update a user, first of all, Soffid **generates the AD user**. That is, Soffid calculates the values of the AD user object from the original values of Soffid.






















#### By clicking on the generate AD user step,...

You can configure the attributes related to the user object for this step.

## Attribute mappings

### System objects

user based on user

System attribute		Direction	Soffid attribute		+
objectClass		←	"user"		
relativeBaseDn		←	"OU=" + primaryGroup		
givenName		←	firstName		
cn		←	fullName		
sn		←	lastName		
department		←	primaryGroup		
sAMAccountName		←	userName		

Test

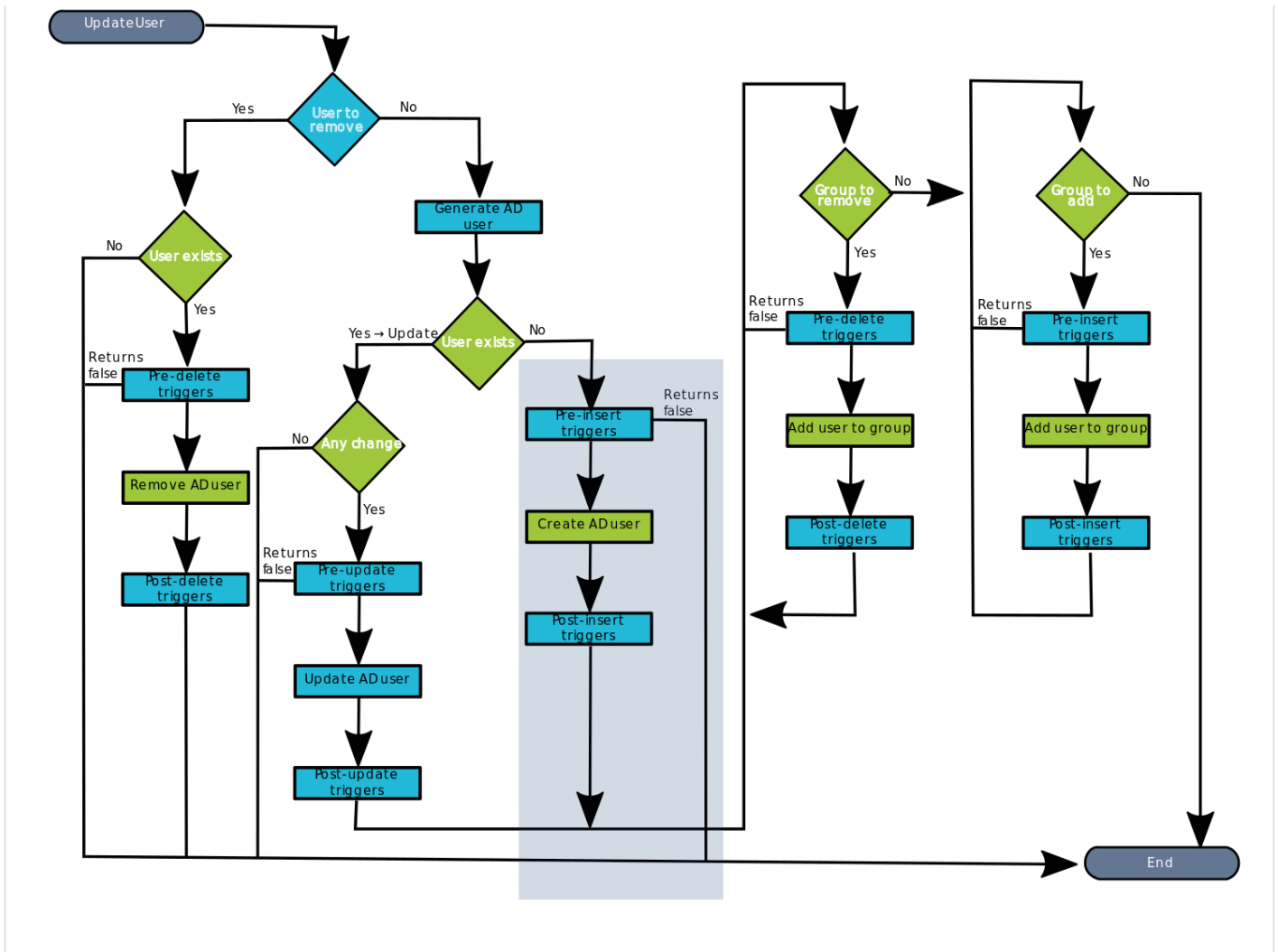
**4.2.** Then Soffid asks if the **user exists** in the target system to decide the action to execute, this action can be an update or an insert.

**4.2.1.** If the **user does not exist** in the target system, the process continues through [\[5. Insert user branch\]](#).

**4.2.2.** If the **user exists** in the target system, the process continues through [\[6. Update user branch\]](#).

## 5. Insert user branch

### Diagram



**5.1.** Soffid executes the **pre-insert triggers** if there is anyone configured. More than one script can be configured. These scripts are executed just before the main action, user creates, and the result (true or false) determines if the main action will be performed or not.

**5.1.1. False:** if the response is false for one or more of these triggers, the process finishes **[10. End]** and the user is not created in the target system.

**5.1.2. True:** if the response is true for all of these triggers, Soffid continues to the next step.

**5.2.** Soffid **creates AD user** in the Active directory

**5.3.** Then Soffid executes **post-insert triggers** if any. These triggers can be used to perform a specific action just after performing the create user operation on the target object.

#### ☐ By clicking on the **Post-insert triggers** step,...

You can configure the Post-insert triggers related to the user object for this step.

## Output triggers

### System objects

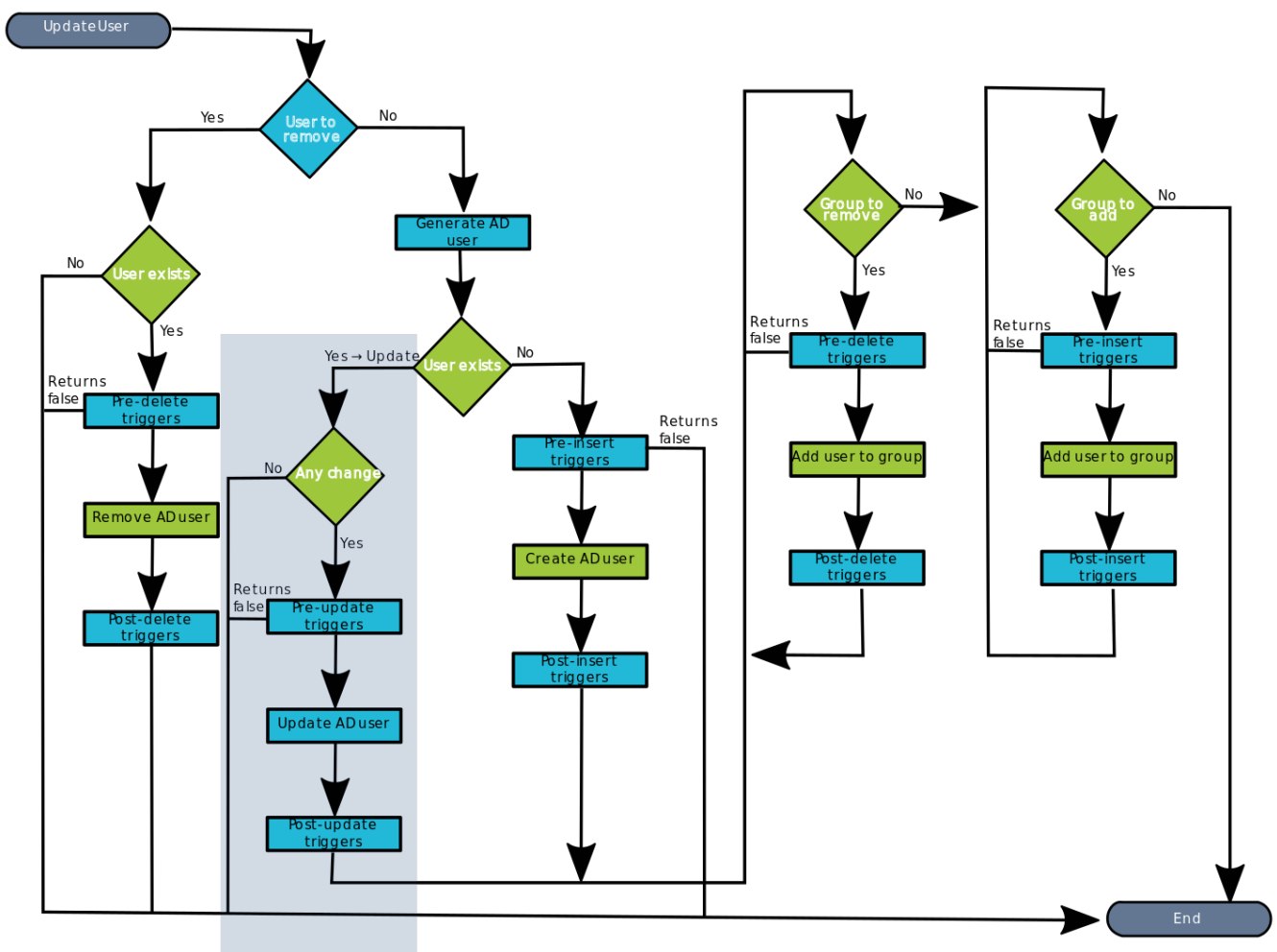
USERS based on user

Trigger	Script		
postInsert			

5.4. Then the process continues through [7. Groups].

## 6. Update user branch

### Diagram



6.1. Soffid checks if there are **any change** between the generated object and the values of the object in the target system.

6.1.1. **False**: if there are no changes, the process finishes [10. End].



**6.1.2. True:** if there are changes to update, Soffid continues to the next step.

**6.2.** Soffid executes the **pre-update triggers** if there is anyone configured. More than one script can be configured. These scripts are executed just before the main action, user update, and the result (true or false) determines if the main action will be performed or not.

**6.2.1. False:** if the response is false for one or more of these triggers, the process finishes [\[10. End\]](#) and the user is not updated in the target system

**6.2.2. True:** if the response is true for all of these triggers, Soffid continues to the next step.

#### By clicking on the Pre-update triggers step,...

You can configure the Pre-update triggers related to the user object for this step.

##### Output triggers

System objects

USERS based on user

Trigger	Script		+
preUpdate	userName = source("userName"); attributes = serviceLocator.getUserService().findUserAttributes(userName);		-

#### **6.3.** Soffid updates the AD user in the Active directory

#### By clicking on the update user step,...

You can configure the properties related to the user object for this step.

##### MappingProperties

System objects

user based on user

Property	Value	+
rename	false	-

**6.4.** Then Soffid executes the **post-update triggers** if any. These triggers can be used to perform a specific action just after performing the update user operation on the target object.

#### By clicking on the Post-update triggers step,...

You can configure the Post-update triggers related to the user object for this step.

## Output triggers

### System objects

user based on user

Trigger	Script		
postUpdate			

6.6. Then the process continues through [\[7. Grants\]](#).

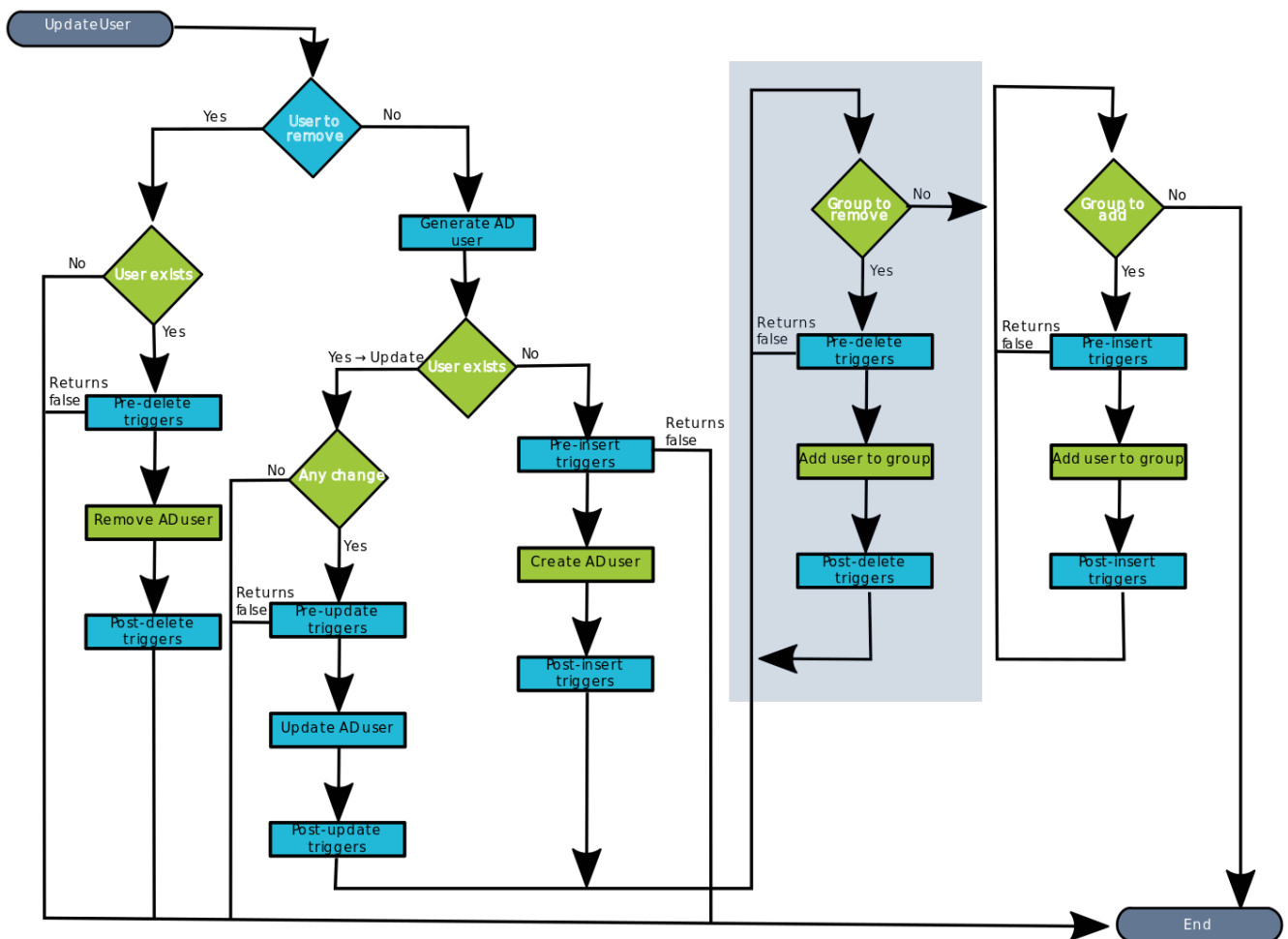
## 7. Grants

At this point, Soffid runs the actions relative to the grants. The operations can be to add the user to one or more groups or to remove the user from existing groups.

## 8. Group to remove

This is a loop while there are groups to remove.

### Diagram



**8.1.** If there are **No** groups to remove, the process goes to [\[9. Group to add\]](#).

**8.2. Yes**, there are groups to remove:

**8.2.1.** Soffid executes the **pre-delete triggers** if there is anyone configured. More than one script can be configured. These scripts are executed just before the main action, a **Remove user to group**, and the result (true or false) determines if the main action will be performed or not.

**8.2.1.1. False:** if the response is false for one or more of these triggers, the process goes to [\[8. Group to remove\]](#) and the grant is not created.

**8.2.1.2. True:** if the response is true for all of these triggers, Soffid continues to the next step.

#### By clicking on the Pre-delete triggers step,...

You can configure the Pre-delete triggers related to the grant object for this step.

##### Output triggers

System objects



based on grant



Trigger	Script		+
preDelete	return true;		-

**8.2.3.** If the result of the triggers is true, then Soffid **adds the user to a group**.

**8.2.4.** Then Soffid executes the **post-insert triggers** if any. These triggers can be used to perform a specific action just after performing the create grant operation on the target object.

#### By clicking on the Post-delete triggers column values step,...

You can configure the Post-Update related to the grant object for this step.

##### Output triggers

System objects



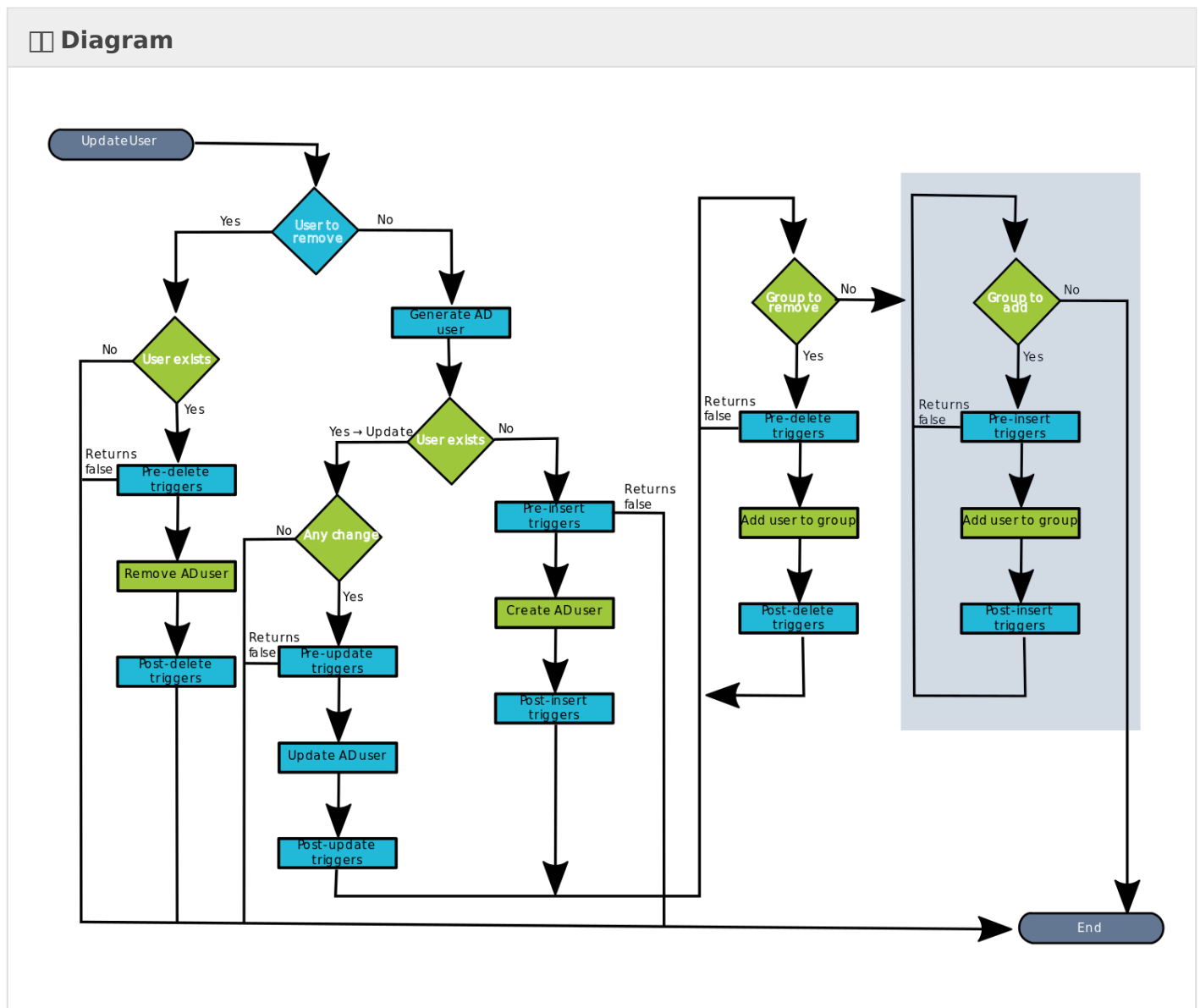
based on grant



Trigger	Script		+
postDelete			-

**8.2.5.** Then the process continues through [\[8. Grant to add\]](#).

## 9. Group to add



This is a loop while there are grants to remove. This grants list comes from the previous step [7. Grants].

**9.1 No:** If there are No grants to add, the process goes to [10. End].

### 9.2. Yes, there are grants to remove:

**9.2.1.** Soffid executes the **pre-insert triggers** if there is anyone configured. More than one script can be configured. These scripts are executed just before the main action, **Add user to group**, and the result (true or false) determines if the main action will be performed or not.

**9.2.1.1. False:** if the response is false for one or more of these triggers, the process finishes [10. End] and the grant is not deleted.

**9.2.1.2. True:** if the response is true for all of these triggers, Soffid continues to the next step.

#### By clicking on the pre-delete trigger step,...

You can configure the Pre-delete triggers related to the grant object for this step.

##### Output triggers

System objects

USER\_ROLES based on grant

Trigger	Script		
preDelete	if (grantedRole.equals( "sodfg " )) return true; else return false;		

**9.2.2.** If the result of the triggers is true, then Soffid **adds the user to the group**. This operation can return a true or false result.

**9.2.2.1. False:** the add action could not be performed and the process check for another grant [\[9. Group to add\]](#).

**9.2.2.2. True:** the add action could be performed properly. Soffid continues to the next step.

**9.2.3.** Then Soffid executes the **post-insert triggers** if any. These triggers can be used to perform a specific action just after performing the add grant operation on the target object.

#### By clicking on the post-insert trigger step,...

You can configure the Post-insert triggers related to the grant object for this step.

##### Output triggers

System objects

USER\_ROLES based on grant

Trigger	Script		
postDelete	grantedRole = source( "grantedRole" ); if (grantedRole.equals( "sodfg " )) return true;		

**9.2.4.** Then the process continues through [\[9. Group to add\]](#).

## 10. End

The process finishes and the log is displayed, and you can download it by clicking the *Download* button.

## Log detail

### Test log

Status: Success

Test log

Filter

8/26/22, 7:45:33 AM INFO Searching for object (&(objectClass=user)(sAMAccountName=administrator)) on domain dc=soffid,dc=pat (dc=so

⊖ Generating AD user object

⊖ Updating object cdarwin

⊕ Searching for AD object

8/26/22, 7:45:33 AM INFO Update existing object

⊖ Running triggers user.preUpdate

⊖ Updating Active Directory Object

⊖ Distinguished Name change detected

⊖ Distinguished Name change detected

⊖ Setting user status (userAccountControl

8/26/22, 7:45:33 AM INFO Searching for object (&(objectClass=user)(sAMAccountName=cdarwin)) on domain dc=soffid,dc=pat (dc=s

8/26/22, 7:45:33 AM INFO Current user status: 512

⊖ Setting group membership

8/26/22, 7:45:33 AM INFO Searching for object (&(objectClass=user)(sAMAccountName=cdarwin)) on domain dc=soffid,dc=pat (dc=s

⊖ Adding cdarwin to [Support IT]

Total rows: 2

Download

Close

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