

# Permissions request steps

Define the Permissions request steps

- Start
- Grant approval
- Apply changes
- End

# Start

## Definition

That is the first step of the workflow. At that step, you could define the fields you want to show when the end users. In that case, the request will be launched automatically when the end users request to use a privileged account to connect to a protected resource.

Administrator users can define on XACML Policy Management page the rules to request the use of some privileged accounts.

## Steps Tabs

### Task details

This process type does not have task details for the start step.

### Fields

In this tab, you could choose what fields the process form will show to the end users. You can choose these fields from all identity attributes, and from the attributes defined for the workflow on the Attributes Tab.

By default, only the fields defined on the attributes tab will be shown. You can choose the fields you want to show when the end-users, add new fields, and delete the fields that do not need to generate a task. Also, you can sort the fields, you only need to drag and drop on the Order column.

For each field, you may indicate if it is a readOnly field, and you may add a Validation script and Visibility script. The validation script allows you to define rules, the field has to comply with these rules. The visibility script allows you to define the rules to show or hide a field.

### Validation examples

```
if (value == null || value.equals(""))  
    throw new Exception("The userName is mandatory");
```

```
else  
    return true;
```

It is also allowed in the following manner:

```
if (value == null || value.equals(""))  
    return ("The userName is mandatory");  
else  
    return true;
```

Validate that a certain field is not repeated:

```
userList = serviceLocator.getUserService().findUserByJsonQuery("attributes.field_XX eq \"\" + value + "\"");  
if (!userList.isEmpty()) {  
    return "the field field_XX is associated to another user";  
}  
return true;
```

## Visibility example

```
user = serviceLocator.getUserService().getCurrentUser();  
if ("admin".equals(user.userName))  
    return false;
```

# Triggers

On the trigger tab, you could define different triggers using custom scripts. Those triggers will be launched with the events you will define.

- **onLoad:** you can use that trigger to perform some actions before the execution of the step.
- **on PrepareTransition:** you can use that trigger to perform some actions after the execution of the step and before starting a transition to another step.
- **onChange:** you can use that trigger to perform some actions when the value of the attribute is changed. You could choose the field from a list.

## Example

```
account = (inputFields.get("account")!=null) ? inputFields.get("account").value : null;
systemName = (inputFields.get("systemName")!=null) ? inputFields.get("systemName").value : null;
.....
```

## Incoming transitions

This process type does not have task details for the start step.

## Outgoing transitions

The Outcoming transition tab displays the next steps where the flow can go from the current step. When you create a process from a template or from scratch default outgoing transitions are defined. It is allowed to customize the default setup, add new transitions, or delete transitions.

- **From:** current step.
- **Incoming transition:** name of the transition.
- **To:** the next step, where the flow goes.
- **Action:** allows creating a custom script to perform specific actions.

When you create an outgoing transition, Soffid creates the proper incoming transition.

## Example

```
accounts = serviceLocator.getAccountService().findAccountByJsonQuery("name eq \"\" +
executionContext.getVariable("account") + "\"");
if (!accounts.isEmpty()) {
    for (account:accounts) {
        owners = serviceLocator.getAccountService().getAccountUsers(account);
        // TO-DO
    }
}
```

# Grant approval

## Description

This step is used to define the custom form that will be used by the users who have to approve or reject the generated task. To configure that step will be necessary to determine the fields that will be shown to the users, and the actions that these users could perform.

## Steps Tabs

### Task details

- **Task name:** identified name for the task that will be created.
- **Permission request screen type:** allows selecting the type of screen for permission request.
  - List of permissions
  - **Display approval pending:** that is the default option. When you select that option, all the approval pending will be shown to the end user.
  - Display all
  - Display approved
  - Display denied
- **Actor(s) expression:** write an expression to identify the actor depending on the requested role. One can use EL expressions based on role and application attributes. For instance: SOFFID\_MANAGER/\${primaryGroup}
- **Assignment script:** alternatively, write a Beanshell script to return the actor depending on the process variables. For instance: return primaryGroup.attributes{"owner"};
- **Approve from email:** checked it to allow you to send a mail to approve or deny the task. If you check that option (selected value Yes), you need to fill in the transitions to approve and deny the task, those have to match with the outgoing transitions defined for those step.
  - Approval transition: has to match with an outgoing transition.
  - Denial transition: has to match with an outgoing transition.

To send mail, you will need to configure mail server parameters. You can visit the [Soffid parameters page](#) for more information.

**Task details** **Incoming transitions** **Outgoing transitions**

Task name : Permissions System XXXX

Permission request screen type : Display approval pending ▾

Write an expression to identify the actor depending on the requested role.  
 One can use EL expressions based on role and application attributes.  
 Additionally any process variable is available.  
 For instance: `${role.attributes['owner']}` or `APPLICATION_OWNER/${application.name}`

Actor(s) expression : `${role.attributes['owner']}`

Alternatively, write a Beanshell script to return the actor depending on the requested role.  
 Additionally to task variables, role and application objects are available.  
 For instance: `return role.attributes["owner"];` or `return "APPLICATION_OWNER/" + application.name;`

Assignment script : Assignment script

Approve from email: : Yes III

Approval transition: : Approve

Denial transition: : Reject

**Task details** **Fields** **Incoming transitions** **Outgoing transitions**

From	Outgoing Transition	To	Action
Approve ▾	Approve	Apply changes ▾	
Approve ▾	Reject	End ▾	

New transition

## Example Assignment script

If a user belongs to the primary group "World", the manager of that group will be responsible to approve or deny the request. If the primary group is another, the persona who will be responsible to approve or deny will be the manager of the parent group of that group. If there is not primary group, the request will be sent to the admin user.

```
primaryGroup = executionContext.getVariable("primaryGroup");
if (primaryGroup != null && !primaryGroup.equals("")) {
    if (primaryGroup.equals("world")) {
        manager =
serviceLocator.getGroupService().findGroupByGroupName(primaryGroup).getAttributes().get("manager");
        return manager;
    } else {
        group = serviceLocator.getGroupService().findGroupByGroupName(primaryGroup);
        if ( group.parentGroup != null && !group.parentGroup.equals("")) {
            manager =
serviceLocator.getGroupService().findGroupByGroupName(group.parentGroup).getAttributes().get("manager");
```

```
    return manager;
  }
} else {
  return "admin";
}
```

## Fields

In this tab, you could choose what fields the process form will show to the end users. You can choose these fields from all identity attributes, and from the attributes defined for the workflow on the Attributes Tab. By default, all the identity attributes will be shown. You can choose the fields you want to show, add new fields, and delete the fields that do not need to generate a task. Also, you can sort the fields, you only need to drag and drop on the Order column.

For each field, you may indicate if it is a readOnly field, and you may add Validation script and Visibility script. The validation script allows you to define rules, the field has to comply with these rules. The visibility script allows you to define the rules to show or hide a field.

### Example

```
if (value == null || value.equals(""))
  return ("The user is mandatory");
else
  return true;
```

## Incoming transitions

The Incoming transitions tab displays the previous steps where the flow comes from. When you create a process from a template or from scratch default incoming transitions are defined. It is allowed to customize the default setup, add new transitions, or delete transitions.

- **From:** the previous step, where the flow comes. Allows you to select where the workflow comes from.
- **Incoming transition:** brief name to identify the transition. That is the name of the action the form will show to the final user.
- **To:** current step.
- **Action:** allows creating a custom script to perform specific actions.

When you create an incoming transition, Soffid creates the proper outgoing transition.

### Example

Validation of mandatory fields:

```
a = executionContext.getVariable("firstName");
if (a==null || "".equals(a.trim()))
    throw new Exception("First name is mandatory");

a = executionContext.getVariable("lastName");
if (a==null || "".equals(a.trim()))
    throw new Exception("Last name is mandatory");

a = executionContext.getVariable("primaryGroup");
if (a==null || "".equals(a.trim()))
    throw new Exception("Primery group is mandatory");

return true;
```

To request the process is only allowed for Internal users:

```
userSelector = executionContext.getVariable("userSelector");
user = serviceLocator.getUserService().findUserByUserName(userSelector);
if (user.userType.equals("I") || user.userType.equals("S")) {
    throw new Exception ("To request the process is only allowed for Internal users");
}
```

## Outgoing transitions

The Outcoming transition tab displays the next steps where the flow can go from the current step. When you create a process from a template or from scratch default outcoming transitions are defined. It is allowed to customize the default setup, add new transitions, or delete transitions.

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## Example

Scroll through the list of values to perform some operations.



```
grants = executionContext.getVariable("grants");  
for (roleRequestInfo:grants) {  
    // TO-DO  
}
```

# Apply changes

## Definition

This step is used to assign permission to a user to access to the protected resource.

## Steps Tabs

### Task details

- **Grant account access:** check it (option selected Yes ) if you want to give grant account access to the protected resource.

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### Example

Get the mail of the requester and send a notification.

```
requester = executionContext.getVariable("requester");  
user = serviceLocator.getUserService().findUserByUserName(requester);
```

```
serviceLocator.getMailService().sendTextMail(  
    user.emailAddress,  
    "Resquest Rejected",  
    "XXXXXXXXXXXXXXXX");
```

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When you create an outcoming transition, Soffid creates the proper incoming transition.

### Example

```
requester = executionContext.getVariable("requester");  
user = serviceLocator.getUserService().findUserByUserName(requester);  
.....
```

# End

## Description

The end step finalizes the process. It is the last step of the workflow.

## Steps Tabs

### Task details

This process type does not have task details for the start step.

## Incoming transitions

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### Example

Get the mail of the requester and send a notification.

```
requester = executionContext.getVariable("requester");  
user = serviceLocator.getUserService().findUserByUserName(requester);
```

```
serviceLocator.getMailService().sendTextMail(  
    user.emailAddress,  
    "Resquest Rejected",  
    "XXXXXXXXXXXXXXXX");
```

## Outgoing transitions

This step does not have outgoing transitions. It is the last step of the workflow.