

## 1. Create Custom Workflow (my custom workflow).

Go to Tools > Workflow > Models.

Click on "Create".

Enter the title: my custom workflow.

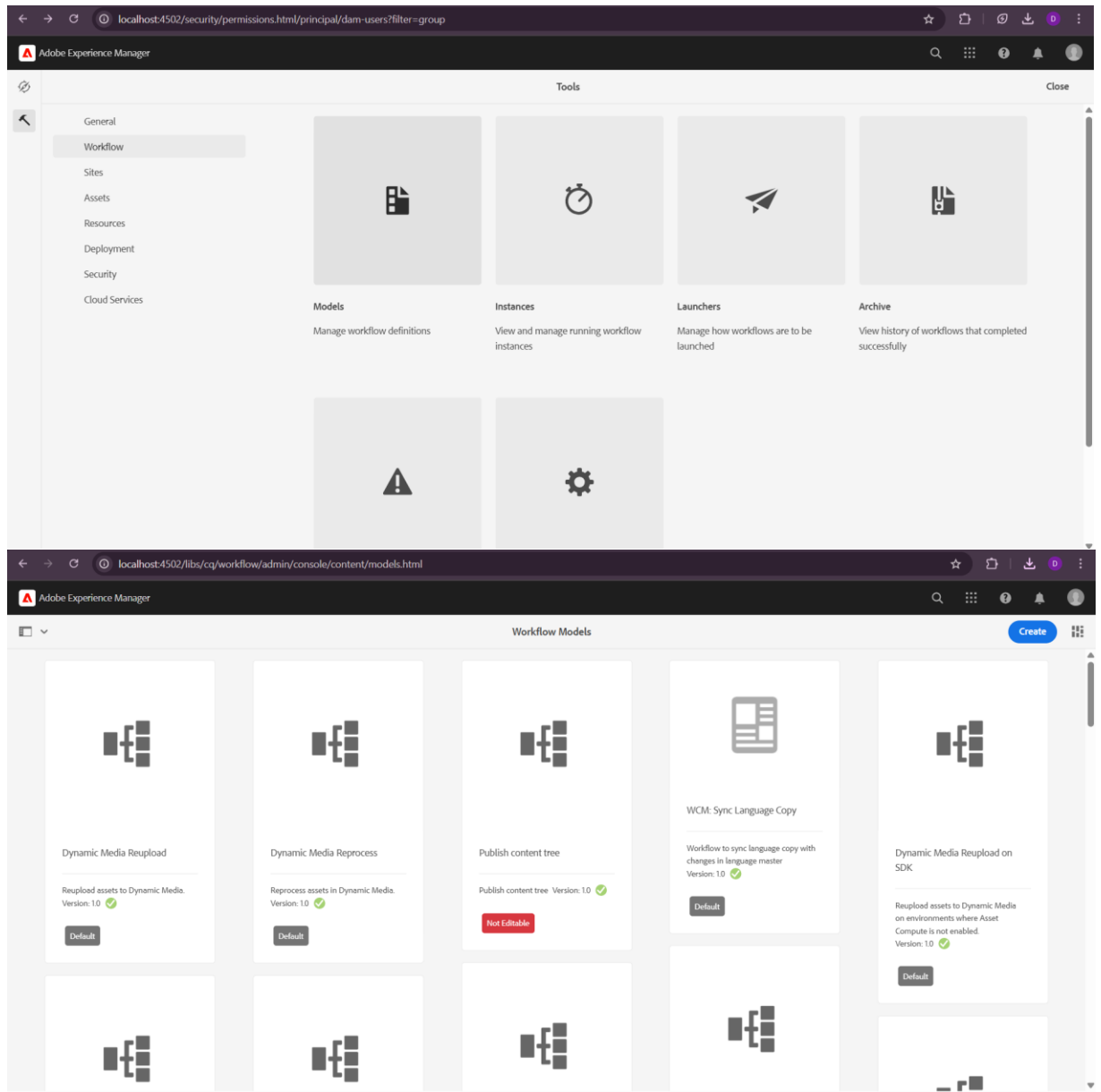
Click on "Create & Open".

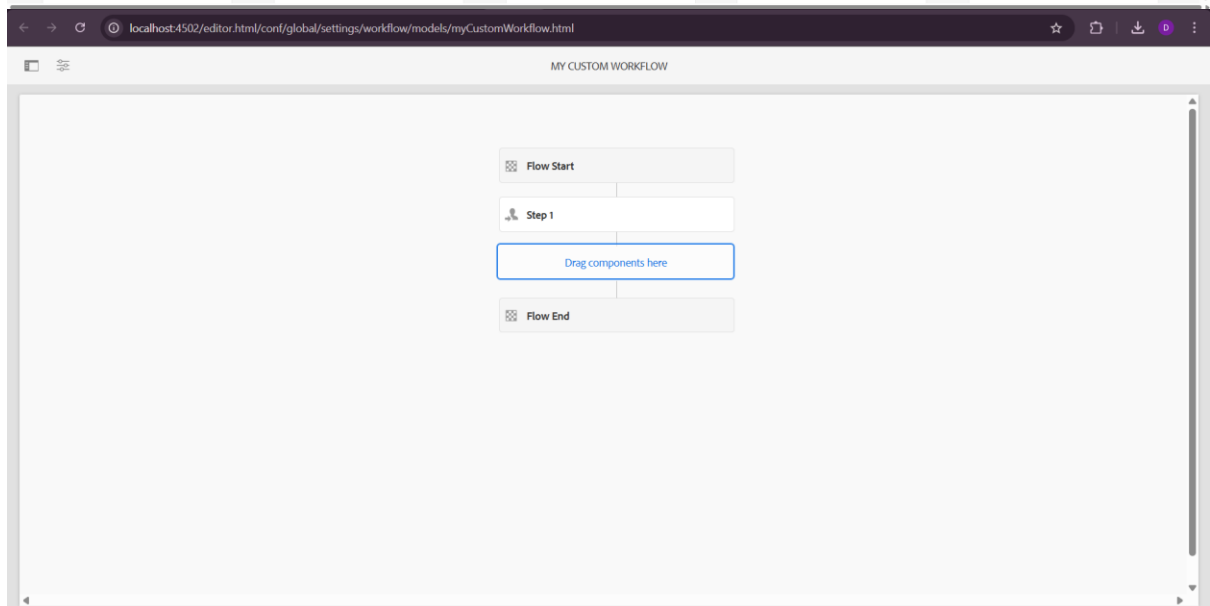
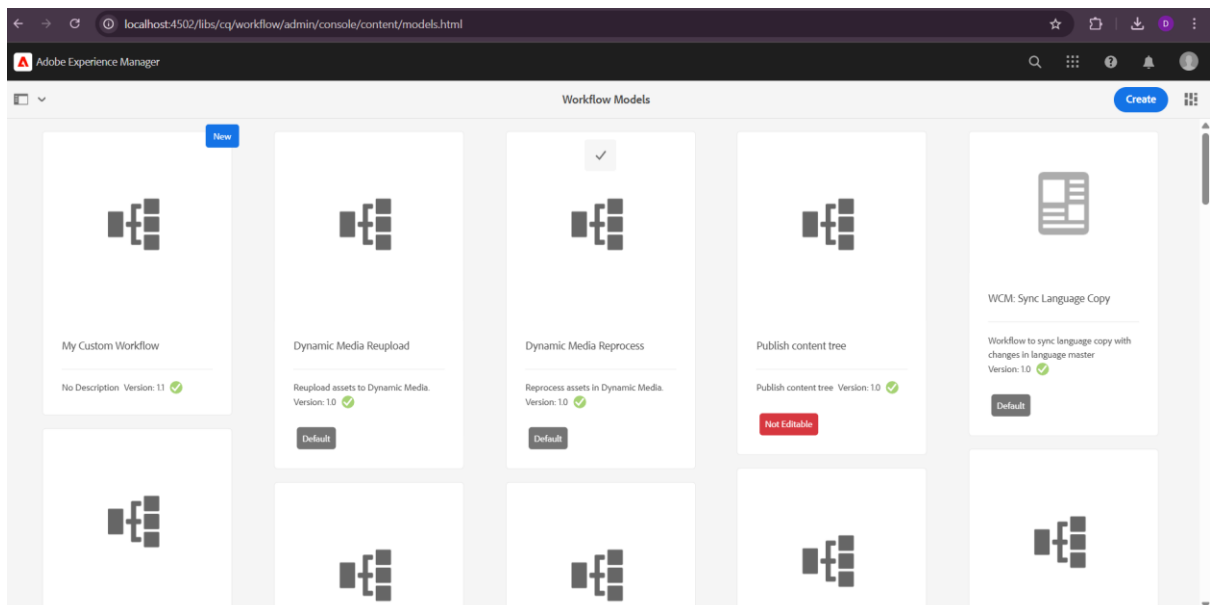
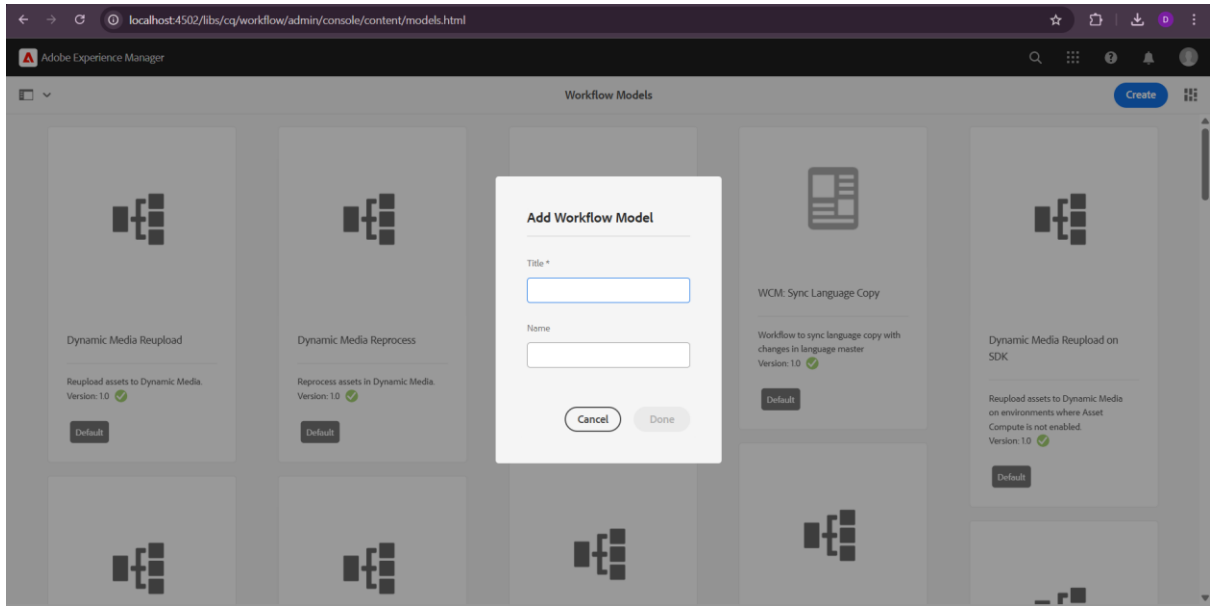
Add a Process Step to the workflow model.

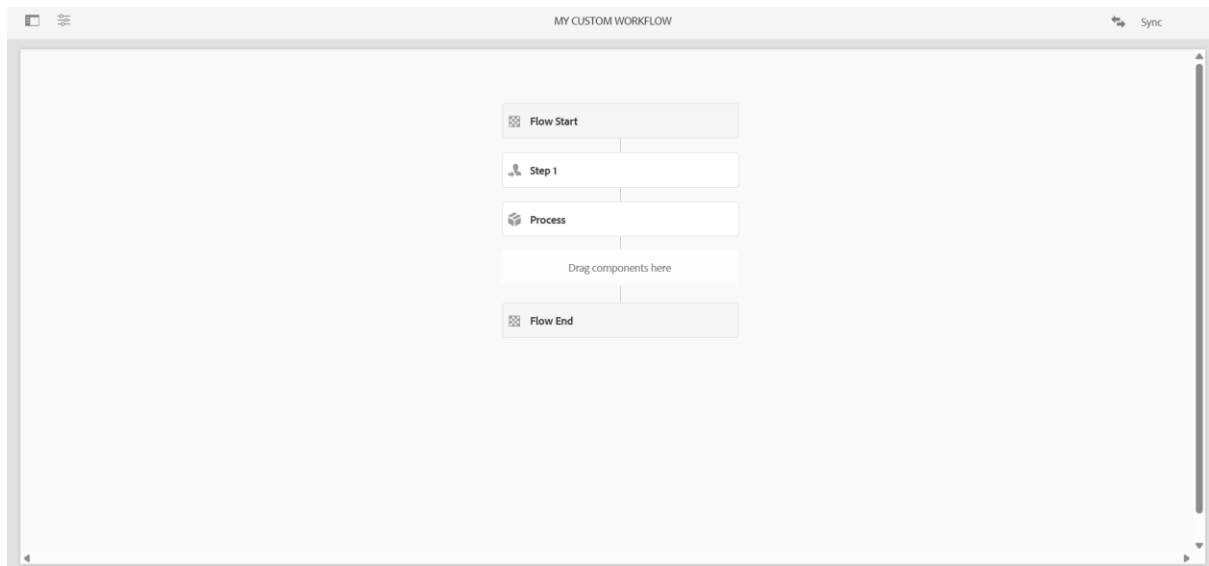
Configure the Process Step:

- Title: Custom Process Step
- Process: CustomWorkflowProcess

Save the workflow.







## 2. Create custom workflow process and print the page title in logs and run this workflow in page so that it can give some metadata in logs

Configure the Process Step : In Process Tab : Provide a custom class name like `com.example.core.workflows.PrintPageTitleProcess` Title: "Print Page Title Step"

**Process**

Common Process

Title  
Print Page Title

Description

Workflow Stage

Timeout Settings

Timeout

Cancel Done

**Create a Workflow Process Java Class Go to AEM project:**  
`/core/src/main/java/com/myTraining/core/workflows/PrintPageTitleProcess.java`

```

@Component(service = WorkflowProcess.class, property = {"process.label=Print Page
Title"})

public class PrintPageTitleProcess implements WorkflowProcess {

private static final Logger LOG = LoggerFactory.getLogger(PrintPageTitleProcess.class);

@Override

public void execute(WorkItem workItem, WorkflowSession workflowSession, MetaDataMap
metaDataMap) {

try {

String path = workItem.getWorkflowData().getPayload().toString();

ResourceResolver resolver = workflowSession.adaptTo(ResourceResolver.class);

if (resolver != null) {

Resource resource = resolver.getResource(path + "/jcr:content");

if (resource != null) {

String title = resource.getValueMap().get("jcr:title", String.class);

LOG.info("Page Title: {}", title);

}

else {

LOG.warn("Resource not found at: {}", path);

} } }

catch (Exception e)

{

LOG.error("Error executing workflow process: ", e);

} } }

```

Run the workflow:

**Workflow Models**

**Run Workflow**

Payload \*

Title

Comment

Cancel Run

**Run Workflow**

Payload \*

Title

Comment

Cancel Run

### 3. Create Event handler in aem and print the resource path in logs.

Create a java file named CustomeventHandler.java

C:\Users\LENOVO\training\aem\codebase\myTraining\core\src\main\java\com\myTraining\core  
 \listeners\CustomeventHandler.java

@Component(

service = EventHandler.class,

immediate = true,

property = {

EventConstants.EVENT\_TOPIC + "=" + SlingConstants.TOPIC\_RESOURCE\_ADDED } )

public class ResourceEventHandler implements EventHandler {

```
private static final Logger LOG = LoggerFactory.getLogger(ResourceEventHandler.class);
@Override
public void handleEvent(Event event) {
String resourcePath = (String) event.getProperty(SlingConstants.PROPERTY_PATH);
LOG.info("Resource added at path: {}", resourcePath);
} }
```

#### **4.create sling job to print hello world message in logs:**

Create HelloWorldSlingJob.java file inside the following path core/src/main/java/myTraining/jobs/HelloWorldSlingJob.java

Package com.muTraining.jobs

```
import org.apache.sling.event.jobs.Job;
import org.apache.sling.event.jobs.consumer.JobConsumer;
import org.osgi.service.component.annotations.Component;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
@Component(service = JobConsumer.class, property =
{"job.topics=custom/job/helloworld"})
public class CustomSlingJob implements JobConsumer {
private static final Logger LOG = LoggerFactory.getLogger(CustomSlingJob.class);
@Override
public JobResult process (Job job) {
LOG.info("Hello World from Sling Job!");
return JobResult.OK;
} }
```

A screenshot of a log output showing the message "Sling Job Triggered Successfully!" in a small, light-colored font on a dark background.

#### **5.Create one scheduler to print the yellow world in logs in every 5 mins through custom configuration using cron expression.**

```
package com.myTraining .core.jobs;
import
org.apache.sling.commons.scheduler.Scheduler;
import
org.osgi.service.component.annotations.Activate;
import
```

```

org.osgi.service.component.annotations.Component;
import
org.osgi.service.component.annotations.Reference;
import
org.osgi.service.metatype.annotations.Designate;
import org.slf4j.Logger;
import org.slf4j.LoggerFactory;
@Component(service = Runnable.class, immediate = true, property = {
"scheduler.expression=0 */5 * * * ?", "scheduler.concurrent=false"})
@Designate(ocd = YellowWorldScheduler.Config.class)
public class YellowWorldScheduler implements Runnable {
private static final Logger LOG = LoggerFactory.getLogger(YellowWorldScheduler.class);

@Reference
private Scheduler scheduler;

@Activate
protected void activate() {
LOG.info("Yellow World Scheduler Activated");
}

@Override
public void run() {
LOG.info("Yellow World from Scheduler!");
}}

```

**6.Create 3 users and add them in a group(Dev author create this new group) and give permission to read only for /content and /dam folder only and they should have replication access as well.**

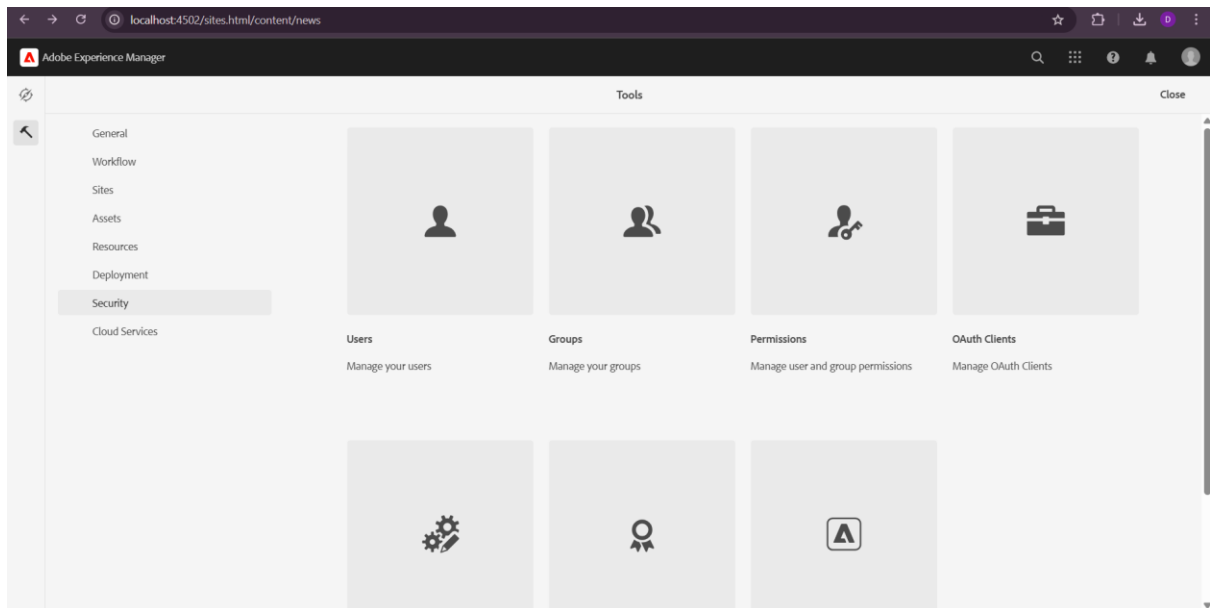
Go to AEM as an Administrator (<http://localhost:4502>). Navigate to

Tools → Security → Groups

Click Create → Create Group.

Enter Group Name: eg:dev-authors

Click Save




Create New Group

Cancel

Save & Close

Details

Members



New Photo

ID \*

Name

Description


Create New Group

Cancel

Save & Close

Details

Members



New Photo

ID \*

Name

Description



localhost:4502/security/groups.html

Adobe Experience Manager

Group Management

Select All Create

NAME	DESCRIPTION	MEMBERS	PUBLISHED	MODIFIED
<input type="checkbox"/> user1		0	Not Published	2 minutes ago Administrator
<input type="checkbox"/> user2		0	Not Published	a minute ago Administrator
<input type="checkbox"/> user3		0	Not Published	a minute ago Administrator
<input type="checkbox"/> administrators		1	Not Published	Not Modified
<input type="checkbox"/> Analytics Administrators	Analytics Administrators group	1	Not Published	Not Modified
<input type="checkbox"/> connectedassets-assets-techacct		0	Not Published	Not Modified
<input type="checkbox"/> connectedassets-sites-techacct		0	Not Published	Not Modified
<input type="checkbox"/> Authors	The group responsible for content editing	0	Not Published	Not Modified
<input type="checkbox"/> Contributors	Base group for all user and groups that must be able to access the authoring environment.	10	Not Published	Not Modified
<input type="checkbox"/> DAM Users	Users of the DAM system	0	Not Published	Not Modified
<input type="checkbox"/> everyone	Built-in group automatically containing all existing users and groups. The list of members cannot be edited.	145	Not Published	Not Modified
<input type="checkbox"/> Experience Fragments Editors	The members of this group are al	0	Not Published	Not Modified

You have successfully saved changes to group 003

## Assign Permissions to the Group:

Navigate to Tools → Security → Permissions.

Click on the group and set Read-Only Access.

Adobe Experience Manager

Permissions

001

Add ACE

Access Control List

Access Control Entries (ACEs)

PATH	PERMISSION	PRIVILEGES	RESTRICTIONS
/home/groups/j/hv5lBg4un640lk-jhxr	allow	jcr.read	

Groups

- user1 (0 members)
- user2 (0 members)
- user3 (0 members)
- administrators (1 member)
- Analytics Administrators (1 member)
- connectedasset...sets-techacct (0 members)
- connectedassets...sites-techacct (0 members)
- Authors (0 members)
- Contributors (10 members)
- DAM Users (0 members)
- everyone (145 members)

localhost:4502/security/permissions.html/principal/dam-users?filter=group

Adobe Experience Manager

Permissions

dam-users

Add ACE

Access Control Entries (ACEs)

PATH	PERMISSION	PRIVILEGES	RESTRICTIONS
/conf	allow	jcr.read	rep.glob="/*/dam/*"
/conf	allow	jcr.read, cnc.replicate, rep.write	rep.glob="/*/dam/dm/presets/viewer"
/conf	allow	jcr.read	rep.glob="/*/settings/cloudconfigs/dynamicmediaservices"
/conf	deny	rep.readProperties	rep.itemNames="remotedamusername", rep.itemNames="remotedampassword", rep.itemNames="localSiteUsername", rep.itemNames="localSitePassword"
/etc	allow	jcr.read	rep.glob="/dam/indesign/scripts"
/content/dam	allow	jcr.versionManagement, cnc.replicate, rep.write, jcr.lockManagement	
/etc/cloudservices	allow	jcr.read	rep.glob="/mediaportal"

Groups

- connectedassets...sites-techacct (0 members)
- Authors (0 members)
- Contributors (10 members)
- DAM Users (0 members)
- everyone (147 members)
- Experience Fragments Editors (0 members)
- operators (0 members)
- projects-administrators (0 members)
- projects-users (1 member)
- tag-administrators (0 members)
- Target Activity Authors (0 members)

