AEM TASK - 6

1. Create a Custom Workflow (my custom workflow)

1. **Navigate to AEM Workflow Models:**
    a. Go to **Tools > Workflow > Models** in AEM.
    b. Click **Create > Create Model** and name it **my-custom-workflow**.
    c. Open the model and click **Edit**.
2. **Add a Custom Workflow Process Step:**
    a. Drag **Process Step** from the side panel into the workflow.
    b. Click on the process step and configure it:
        i. Set **Process** to your custom workflow process.
        ii. Click **OK** and then **Save & Close**.

2. Create a Custom Workflow Process & Print Page Title in Logs

1. **Create a Workflow Process Implementation in Java:**
    a. Create a new Java class implementing `WorkflowProcess`:

```
@Component(service = WorkflowProcess.class, property =
{ "process.label=My Custom Workflow Process" })
public class MyCustomWorkflowProcess implements WorkflowProcess {

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

    @Override
    public void execute(WorkItem workItem, WorkflowSession
workflowSession, MetaDataMap metaDataMap) throws WorkflowException {
        String payloadPath =
workItem.getWorkflowData().getPayload().toString();
        LOG.info("Workflow started for page: {}", payloadPath);

        try (ResourceResolver resolver =
workflowSession.adaptTo(ResourceResolver.class)) {
            PageManager pageManager =
```

```
resolver.adaptTo(PageManager.class);
            Page page = pageManager.getPage(payloadPath);
            if (page != null) {
                LOG.info("Page Title: {}", page.getTitle());
            }
        } catch (Exception e) {
            LOG.error("Error fetching page title", e);
        }
    }
}
```

2. **Deploy and Use the Workflow:**
    a. Deploy the bundle to AEM.
    b. Assign this process to the workflow step you created.
    c. Activate the workflow on a page and check logs.

3. Create an Event Handler in AEM & Print Resource Path in Logs

1. **Create a Sling Event Listener for Resource Events:**

```
@Component(service = EventHandler.class, immediate = true,
           property = { EventConstants.EVENT_TOPIC + "=" +
PageEvent.EVENT_TOPIC })
public class MyEventHandler implements EventHandler {

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

    @Override
    public void handleEvent(Event event) {
        String[] paths = (String[]) event.getProperty("path");
        if (paths != null) {
            for (String path : paths) {
                LOG.info("Resource path: {}", path);
            }
        }
    }
```

```
}
```

2. **Deploy and Test the Event Handler:**
    a. Check logs when a page is created, modified, or deleted.

4. Create a Sling Job to Print "Hello World" in Logs

1. **Create a Sling Job Implementation:**

```
@Component(service = JobConsumer.class,
           property = { JobConsumer.PROPERTY_TOPICS +
"=my/custom/job" })
public class HelloWorldJobConsumer implements JobConsumer {

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

    @Override
    public JobResult process(Job job) {
        LOG.info("Hello World from Sling Job!");
        return JobResult.OK;
    }
}
```

2. **Trigger the Job:**
    a. Run from an OSGi console or a servlet:

```
@Component(service = Servlet.class,
           property = { "sling.servlet.paths=/bin/runjob" })
public class JobTriggerServlet extends SlingSafeMethodsServlet {

    @Reference
    private JobManager jobManager;

    @Override
    protected void doGet(SlingHttpServletRequest request,
```

```
SlingHttpServletResponse response) throws IOException {
        jobManager.addJob("my/custom/job", new HashMap<>());
        response.getWriter().write("Job triggered!");
    }
}
```

5. Create a Scheduler to Print "Yellow World" Every 5 Minutes

1. **Implement an OSGi Scheduler in Java:**

```
@Designate(ocd = MyScheduler.Config.class)
@Component(service = Runnable.class, immediate = true,
           property = { "scheduler.expression=0 0/5 * * * ?" })
public class MyScheduler implements Runnable {

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

    @ObjectClassDefinition(name = "My Custom Scheduler")
    public @interface Config {
        @AttributeDefinition(name = "Cron Expression")
        String scheduler_expression() default "0 0/5 * * * ?";
    }

    @Activate
    protected void activate(Config config) {
        LOG.info("Scheduler activated");
    }

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

2. **Deploy & Verify Logs:**

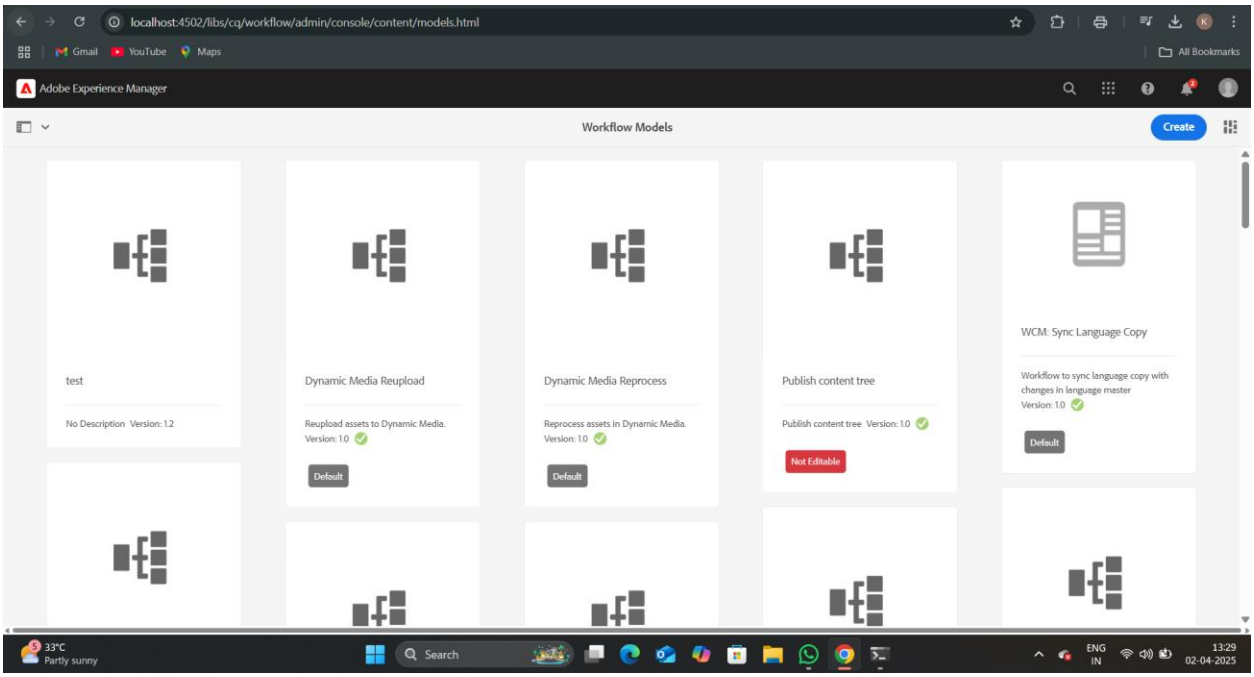
a. Every 5 minutes, it should log "Yellow World".

6. Create 3 Users, a Group, and Assign Permissions

1. **Create Users:**
    a. Go to **Tools > Security > Users** in AEM.
    b. Create **user1, user2, user3**.
2. **Create a New Group:**
    a. Go to **Tools > Security > Groups**.
    b. Create a new group called **Dev Author**.
3. **Add Users to the Group:**
    a. Open the **Dev Author** group and add **user1, user2, user3**.
4. **Assign Permissions:**
    a. Go to **Permissions Console**.
    b. Select **Dev Author** and set:
        i. **Read** access for `/content` and `/dam`.
        ii. **Replication** permissions under **Miscellaneous**.

Final Verification Steps

- **Workflow:** Run it on a page and check logs for title.
- **Event Handler:** Modify a page and check logs for resource path.
- **Sling Job:** Trigger manually and check logs.
- **Scheduler:** Wait for logs every 5 minutes.
- **User Access:** Log in with a new user and ensure they can only read `/content` and `/dam` and replicate.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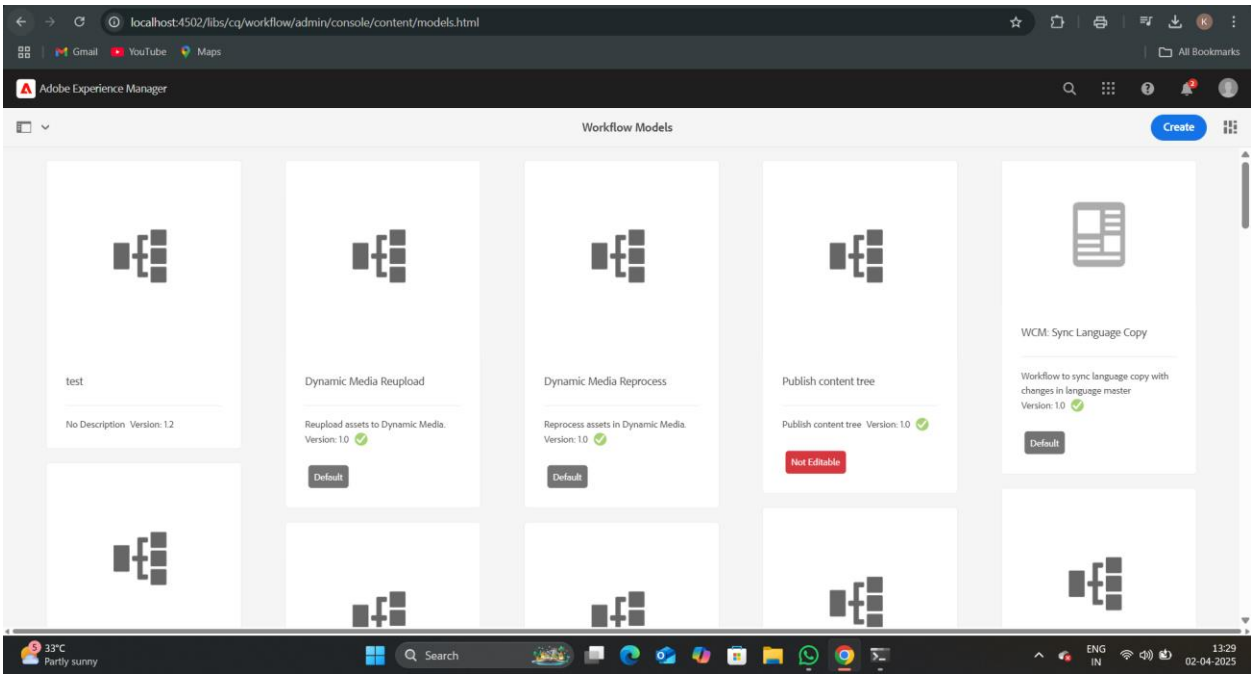
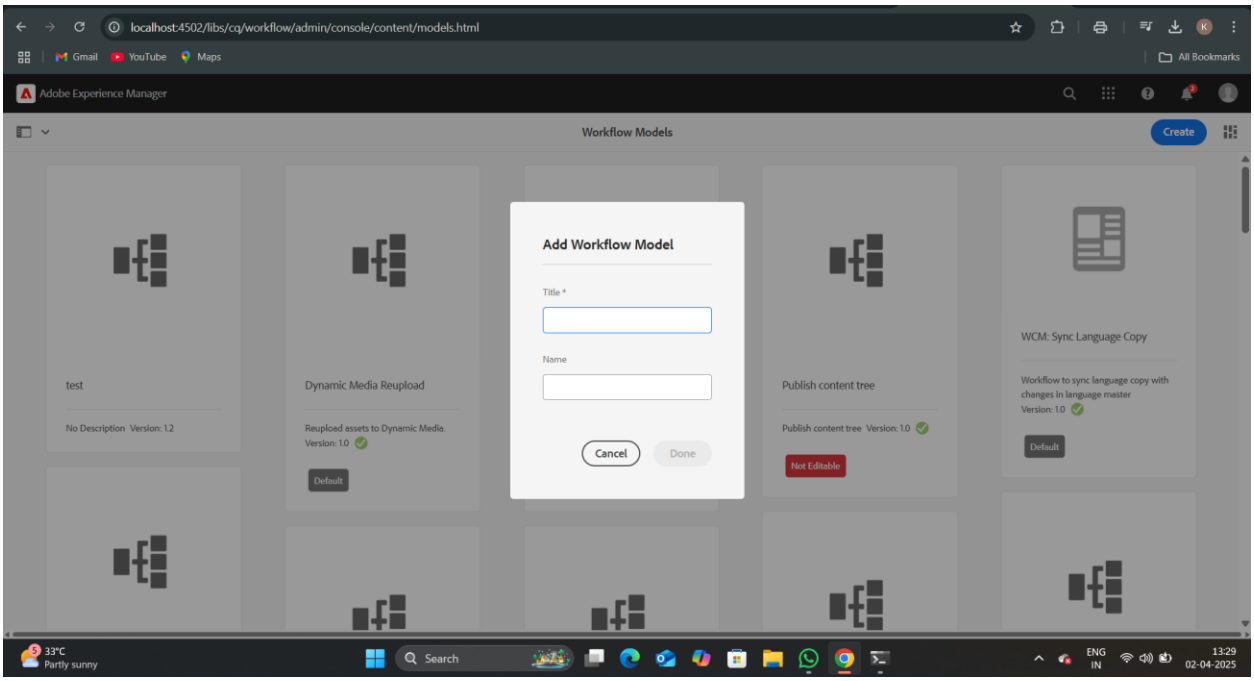
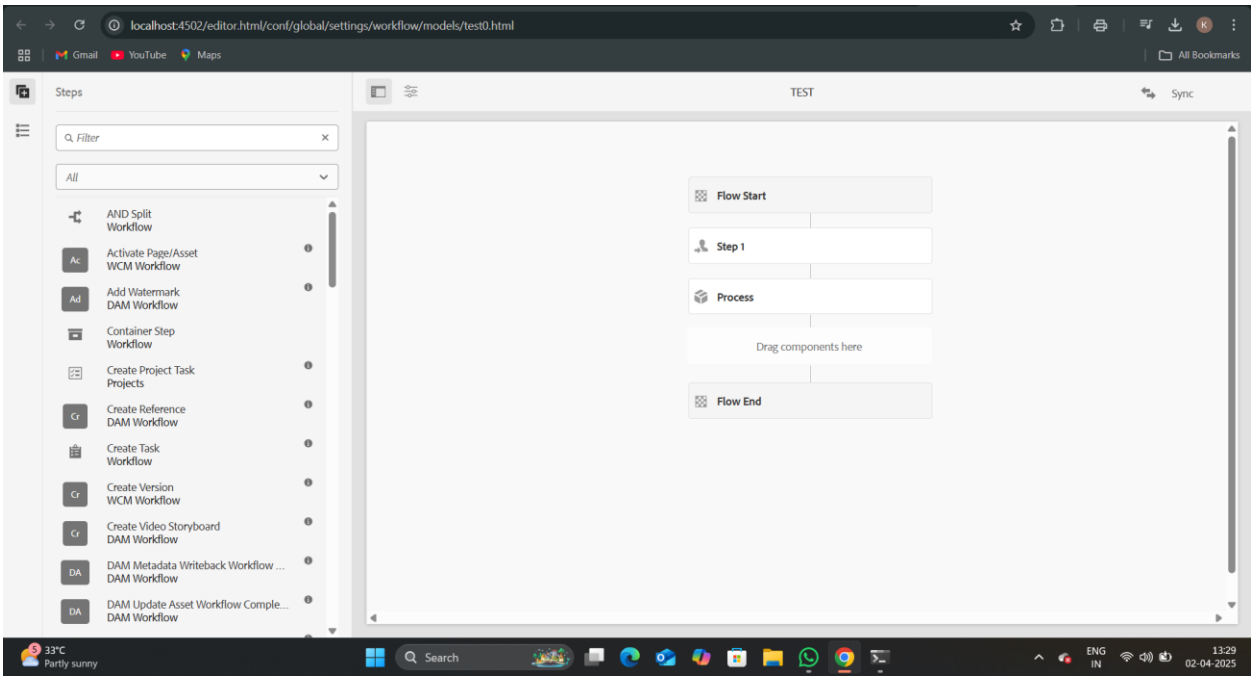
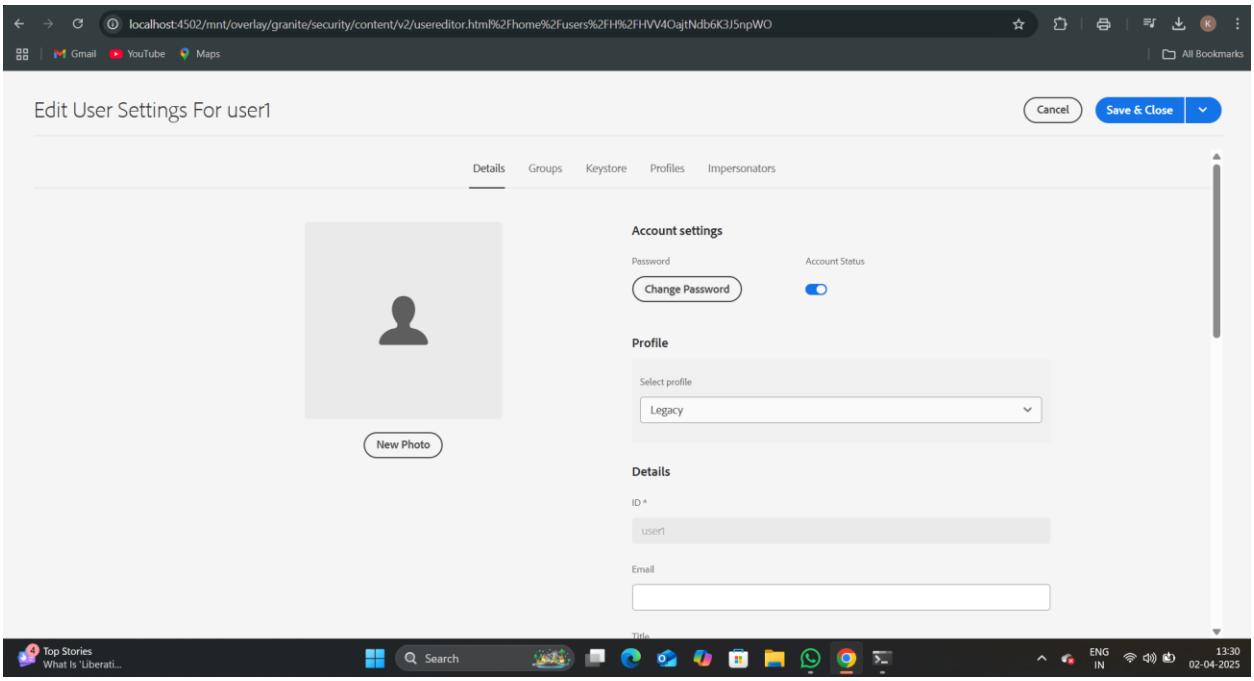
Gmail
YouTube
Maps
All Bookmarks
Adobe Experience Manager
Workflow Models
Create
test
No Description Version: 1.2
Dynamic Media Reupload
Reupload assets to Dynamic Media.
Version: 1.0
Default
Dynamic Media Reprocess
Reprocess assets in Dynamic Media.
Version: 1.0
Default
Publish content tree
Publish content tree Version: 1.0
Not Editable
WCM: Sync Language Copy
Workflow to sync language copy with changes in language master
Version: 1.0
Default
33°C
Partly sunny
Search
ENG
IN
13:29
02-04-2025


localhost:4502/libs/cq/workflow/admin/console/content/models.html
Gmail
YouTube
Maps
All Bookmarks
Adobe Experience Manager
Workflow Models
Create
test
No Description Version: 1.2
Dynamic Media Reupload
Reupload assets to Dynamic Media.
Version: 1.0
Default
Dynamic Media Reprocess
Reprocess assets in Dynamic Media.
Version: 1.0
Default
Publish content tree
Publish content tree Version: 1.0
Not Editable
WCM: Sync Language Copy
Workflow to sync language copy with changes in language master
Version: 1.0
Default
33°C
Partly sunny
Search
ENG
IN
13:29
02-04-2025


localhost:4502/libs/cq/workflow/admin/console/content/models.html
Adobe Experience Manager
Workflow Models
Create
Add Workflow Model
Title *
Name
Cancel
Done
test
No Description Version: 1.2
Dynamic Media Reupload
Reupload assets to Dynamic Media.
Version: 1.0
Default
Publish content tree
Publish content tree Version: 1.0
Not Editable
WCM: Sync Language Copy
Workflow to sync language copy with changes in language master
Version: 1.0
Default


localhost:4502/editor.html/conf/global/settings/workflow/models/test0.html
Steps
Filter
All
AND Split
Workflow
Activate Page/Asset
WCM Workflow
Add Watermark
DAM Workflow
Container Step
Workflow
Create Project Task
Projects
Create Reference
DAM Workflow
Create Task
Workflow
Create Version
WCM Workflow
Create Video Storyboard
DAM Workflow
DAM Metadata Writeback Workflow ...
DAM Workflow
DAM Update Asset Workflow Comple...
DAM Workflow
TEST
Sync
Flow Start
Step 1
Process
Drag components here
Flow End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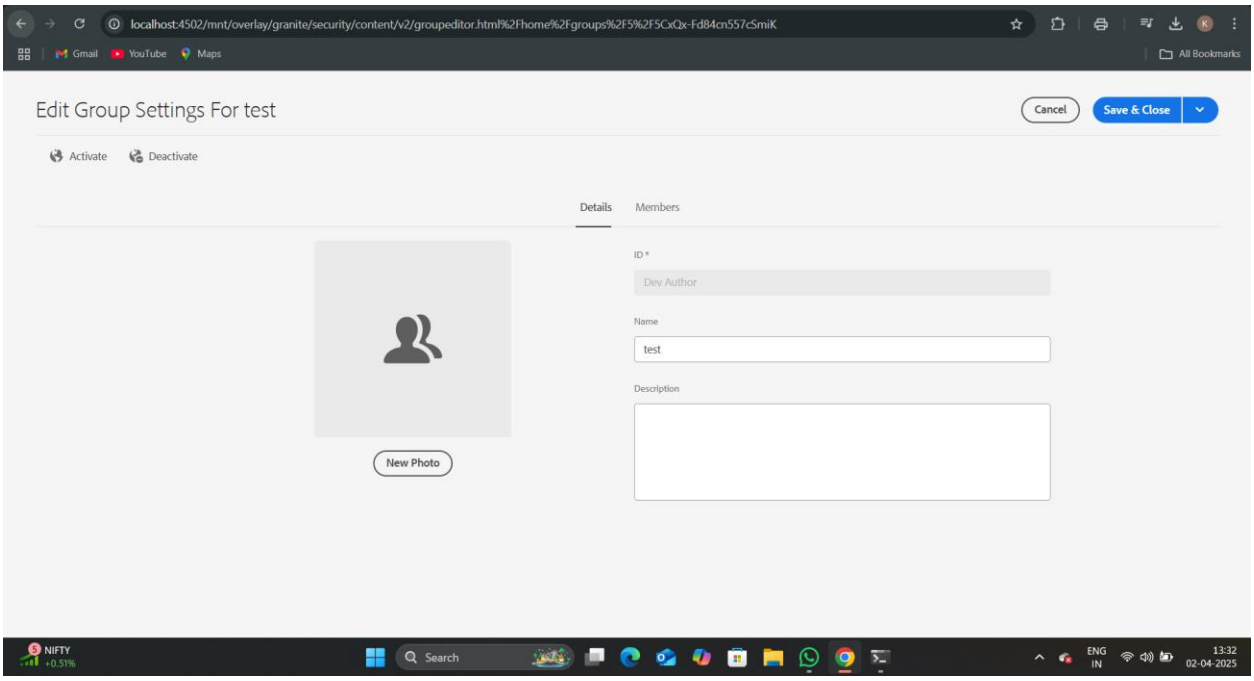
Gmail
YouTube
Maps
All Bookmarks
Edit User Settings For user1
Cancel
Save & Close
Details
Groups
Keystore
Profiles
Impersonators
New Photo
Account settings
Password
Account Status
Change Password
Profile
Select profile
Legacy
Details
ID *
user1
Email
Top Stories
What Is 'Liberati...
Search
ENG
IN
13:30
02-04-2025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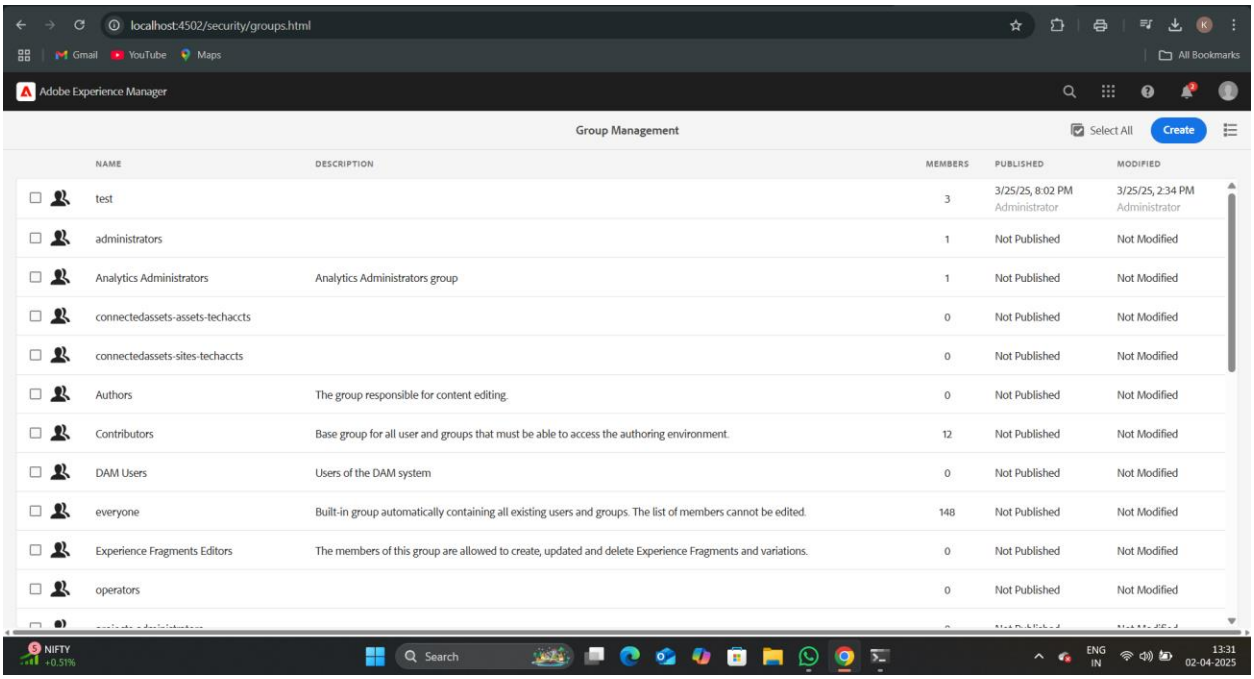
Gmail
YouTube
Maps
All Bookmarks
Edit Group Settings For test
Cancel
Save & Close
Activate
Deactivate
Details
Members
New Photo
ID *
Dev Author
Name
test
Description
NIFTY
+0.51%
Search
ENG
IN
13:32
02-04-2025


localhost:4502/security/groups.html
Gmail
YouTube
Maps
All Bookmarks
Adobe Experience Manager
Group Management
Select All
Create
NAME
DESCRIPTION
MEMBERS
PUBLISHED
MODIFIED
test
3
3/25/25, 8:02 PM Administrator
3/25/25, 2:34 PM Administrator
administrators
1
Not Published
Not Modified
Analytics Administrators
Analytics Administrators group
1
Not Published
Not Modified
connectedassets-assets-techaccts
0
Not Published
Not Modified
connectedassets-sites-techaccts
0
Not Published
Not Modified
Authors
The group responsible for content editing.
0
Not Published
Not Modified
Contributors
Base group for all user and groups that must be able to access the authoring environment.
12
Not Published
Not Modified
DAM Users
Users of the DAM system
0
Not Published
Not Modified
everyone
Built-in group automatically containing all existing users and groups. The list of members cannot be edited.
148
Not Published
Not Modified
Experience Fragments Editors
The members of this group are allowed to create, updated and delete Experience Fragments and variations.
0
Not Published
Not Modified
operators
0
Not Published
Not Modified
NIFTY +0.51%
Search
ENG IN
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