

1.What is DAM and why we use it?

DAM (Digital Asset Management) is a system that helps to store, organize, and manage digital assets like images, videos, and documents. In AEM, DAM is available under `/content/dam` for easy asset management.

Why Use DAM?

- Centralized Storage – Keeps all digital assets in one place.
- Metadata Management – Adds tags and descriptions for easy search.
- Automatic Renditions – Creates different image sizes and formats.
- Version Control – Tracks changes and restores previous versions.
- Workflow Support – Helps manage approvals and publishing.

2. Upload Images to DAM and Author on Page

Steps:

1. Create a folder inside the project at `/content/dam/myTraining/us/en-us`.
2. Upload two images to this folder in **AEM Assets**.
3. Open the required **AEM page** and drag an **Image Component** onto it.
4. Select the uploaded images from **DAM** and save the changes.

2. What are Renditions? Check Renditions for Uploaded Images

Renditions are automatically generated variations of an image in different sizes and formats. These help optimize content for different devices and screens.

Steps to Check Renditions:

1. Go to **AEM Assets** and navigate to `/content/dam/myTraining/us/en-us`.
2. Select an uploaded image and open **Properties**.
3. Click on **Renditions** to see available variations.

3. Add First Name and Last Name Fields in HelloWorld Component

Steps:

1. Edit the **HelloWorld Component's dialog** to add two text fields: `firstName` and `lastName`.
2. Update the **helloWorld.html** file to print these values using properties:

```
<h1>Hello, ${properties.firstName} ${properties.lastName}!</h1>
```

4. Use @ValueMapValue in HelloWorldModel Sling Model

Modify the **HelloWorldModel** in

com.myTraining.core.models.HelloWorldModel by adding email property:

```
@Model(adaptables = Resource.class)
public class HelloWorldModel {

    @ValueMapValue(injectionStrategy = InjectionStrategy.OPTIONAL)
    @Default(values = "No email provided")
    private String email;

    public String getEmail() {
        return email;
    }
}
```

5. Why Use Package Manager? Create Packages for HelloWorld Component & Images

Package Manager in AEM is used for **exporting, transferring, and deploying content** across different environments. It helps bundle and move components, templates, and assets easily.

Steps to Create Packages:

1. Go to **AEM Tools → Package Manager**.
2. Create **two packages**:
 - **DAM Package:** Add /content/dam/myTraining/us/en-us (contains images).
 - **Component Package:** Add /apps/myTraining/components/helloworld.
3. Build and download both packages.

6. Configure Replication Agent & Publish Page from Author to Publish (4502 → 4503)

Replication Agent ensures that content from the **author instance (4502)** is published to the **publish instance (4503)**.

Steps to Configure:

1. Go to **AEM Tools → Replication → Agents on Author**.

2. Click on **Default Agent (publish)** and configure it with the **publish server details** (e.g., <http://localhost:4503>).
3. Save and test the replication connection.

Steps to Publish a Page:

1. Open the AEM **author instance (4502)**.
2. Navigate to the page and click **Publish Page**.
3. Check the published page in the **publish instance (4503)** by accessing its URL.