



LAB- Spring Mvc - Hateos

In this lab you will be understanding how to add links to your responses

STEP -1

In this step, you will be working on **03rest-hateos-start** project

Run the Test.java 25 times so that dummy data will be populated with 25 clusters

1) Open ClusterResourceCreator.java

Link for methods on controller can be created Using **ControllerLinkBuilder** .

To create links for methods on **ClusterController**, you can obtain ControllerLinkBuilder as shown below :

```
ControllerLinkBuilder controllerLinkBuilder=ControllerLinkBuilder.linkTo(ClusterController.class);
```

This link builder will have a link to /clusters.

If you want to create link for /clusters/{clusterId} ,you can do as below :

```
controllerLinkBuilder=controllerLinkBuilder.slash(cluster.getClusterId());
```

To get a Link with rel as self, you can do as below :

```
Link selfLink=controllerLinkBuilder.withSelfRel();
```

But the above process is too verbose.

So, you can do the same as shown below :

```
ClusterController clusterController=ControllerLinkBuilder.methodOn(ClusterController.class);
```

will give you a proxy of ClusterController which can record the method invocations.

```
ClusterDTO clusterDTO2= clusterController.getClusterById(clusterDTO.getClusterId());
```

will give you a proxy of ClusterDTO which has recorded the method invocations.

Then we can create a Link using

```
Link selfLink=ControllerLinkBuilder.linkTo(clusterDTO2).withSelfRel();
```



All of the above can be done in a single step as shown below :

```
Link selfLink=ControllerLinkBuilder.LinkTo(  
    ControllerLinkBuilder.methodOn(ClusterController.class).getClusterById(cluster.g  
etClusterId())).withSelfRel();
```

Now complete TODO-1 in ClusterResourceCreator by initializing selfLink using above code.

Complete TODO-2 also

Complete TODO-3 using below code

```
ControllerLinkBuilder.LinkTo(  
    ControllerLinkBuilder.methodOn(ClusterController.class)  
        .getAllServers(clusterDTO.getClusterId())).withRel("servers");
```

Complete TODO-4 and TODO-5

2) Complete TODO-6 and TODO-7 in DeploymentResourceCreator

3) Complete TODO-8, TODO-9, TODO-10 in ServerResourceCreator

4) So, Now we have 2 ResourceCreators : DeploymentResourceCreator, ServerResourceCreator and ClusterResourceCreator.

5) Observe all the controller methods how we are calling methods on these resource creators.

4) Now deploy the application and give request to /clusters in POSTMAN.

It should show all the links.

Follow all the links by making requests to those links.

Congratulations !! You know how to add links to responses