300

Oracle Public Cloud Workshop

Fusion Middleware

Cloud Services

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Introduction

In this lab you will learn how to backup your Java Cloud service using the Java Cloud Administration console. You will also learn how to restore your Cloud Service using that backup. You will also learn how to use the Java Cloud Service integrated Cloud UI to scale-up the Java Cloud Service by adding an additional node. You'll remove that node (scale-down) programmatically using the administration REST APIs.

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Objectives

- ☐ Backup the Java Cloud Service to a Storage Service
- ☐ Scale-up the Java Cloud Service's WebLogic Server by requesting additional Node
- ☐ Scale-down the WebLogic Server by removing a Node.
- ☐ Restore the Java Cloud Service from a Backup

Required Artifacts

- ☐ The following labs assume that the steps outlined in lab guide 200 have been completed.

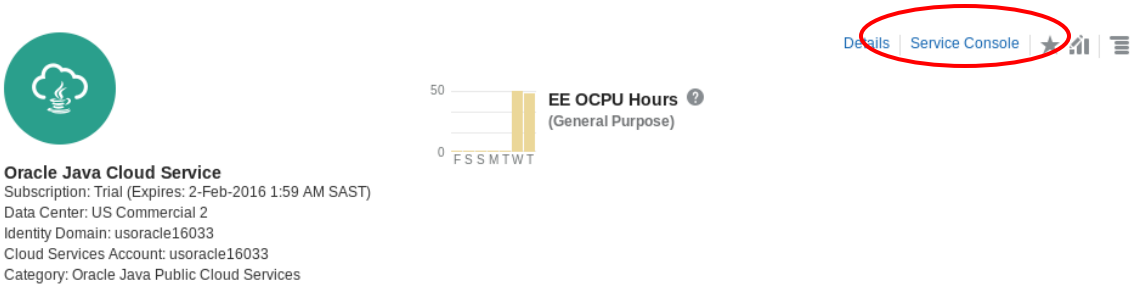
Outline

Operation Tasks

Backup the Java Cloud Service

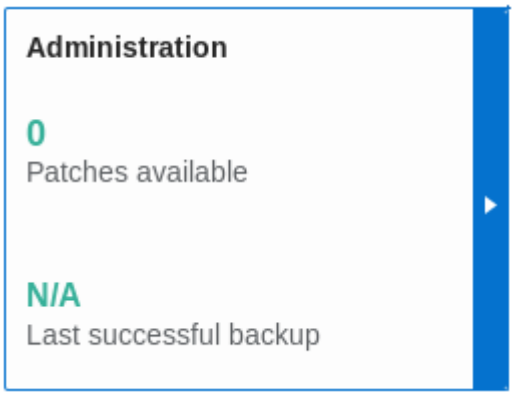
STEP 1: Create Backup of JCS

☐ From the main Dashboard, click on **Open Service Console** for the **Oracle Java Cloud Service**

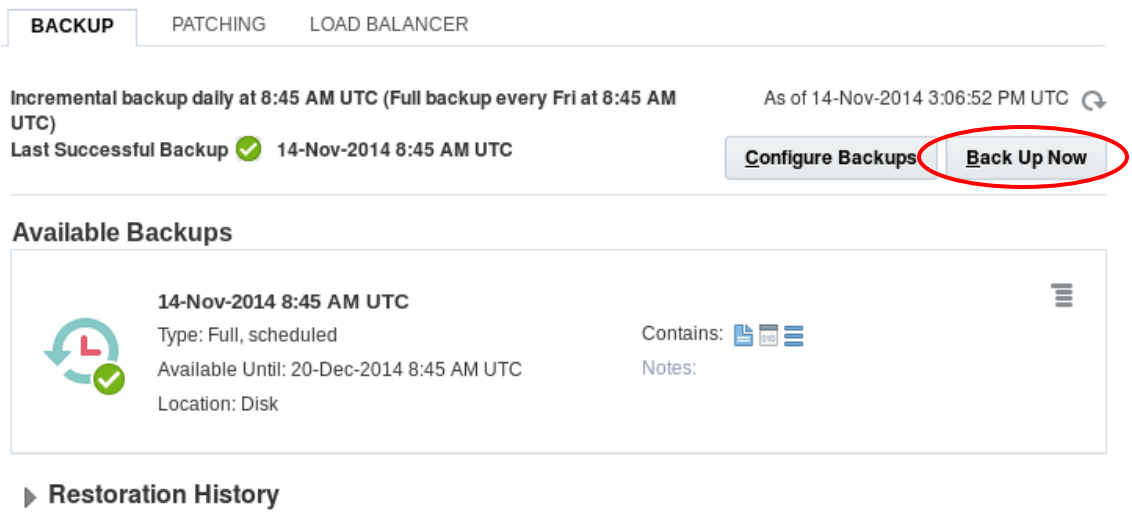


☐ Click on **Alpha01A-JCS** to go to the instance dashboard.

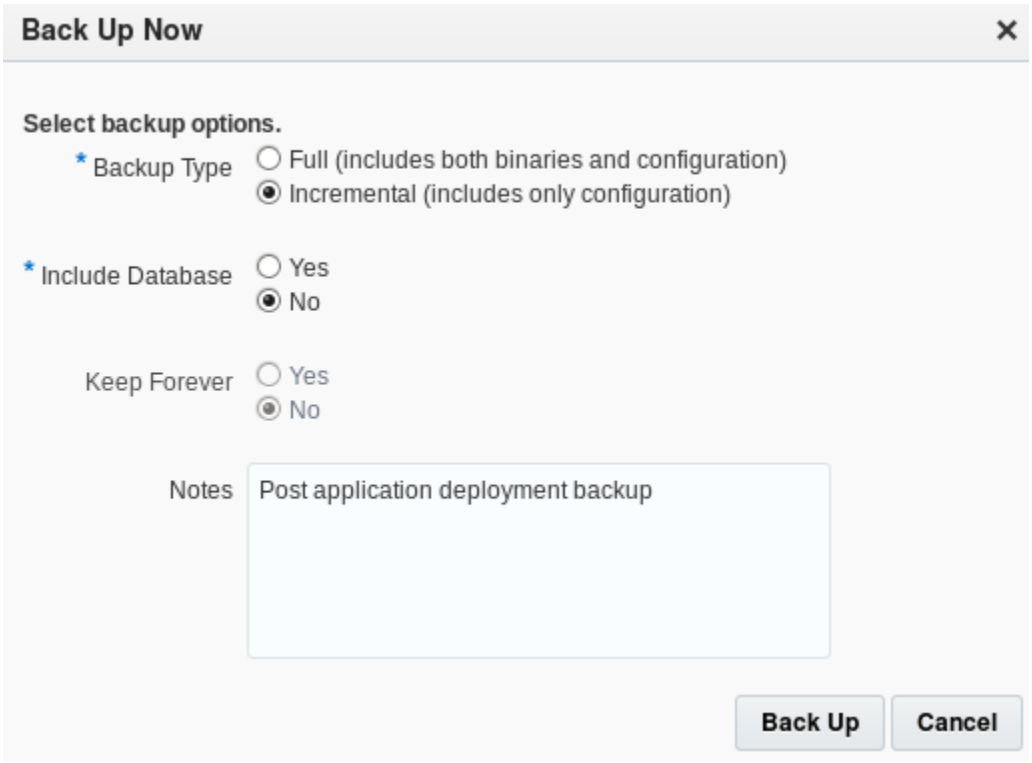
☐ Click on the **ADMINISTRATION** Group



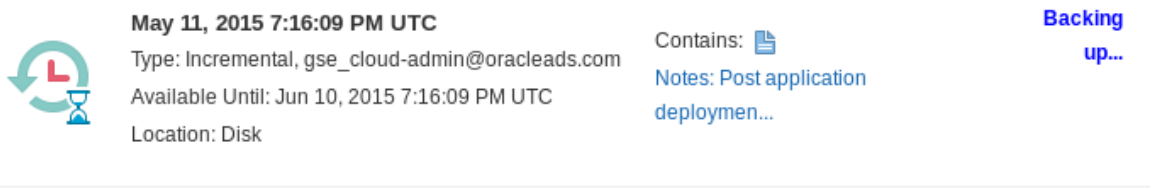
☐ Click on the **Back Up Now** Button



☐ Use the defaults, but enter a note **`Post application deployment backup`** and click on the **Back Up** Button



☐ The backup is now running. You can click the refresh icon to monitor the progress.



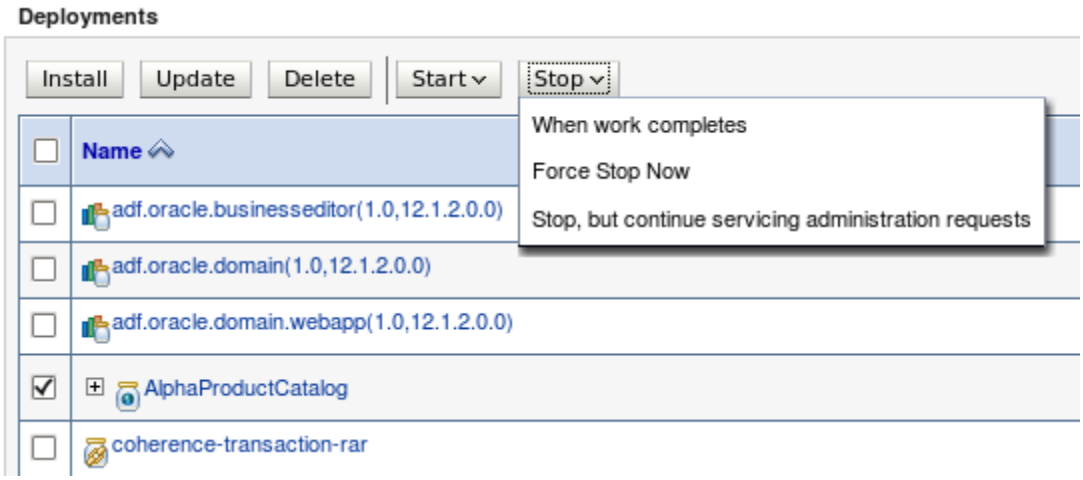
☐ Wait for the backup to complete - the hourglass icon will no longer appear when the backup is complete.

Restore from Backup

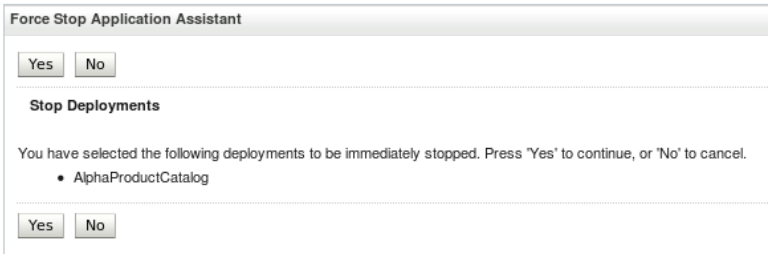
STEP 2: Delete Application AlphaProductCatalog

☐ Prior to doing the restore, we are going to go into WebLogic console and remove the application that we have deployed. When we do the restore, we will see that the Application is once again available.

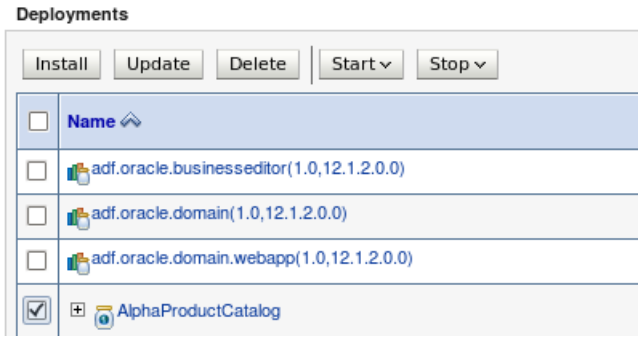
☐ Open WebLogic Console, click **Lock & Edit**, and then go to **Deployments**. Select **AlphaProductCatalog** and click **Stop -> Force Stop Now**



☐ Click **Yes**



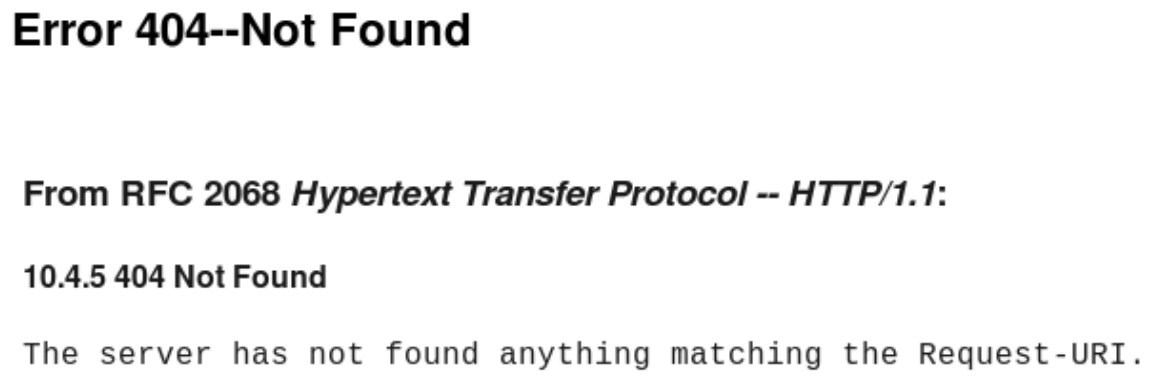
☐ Now select **AlphaProductCatalog** and click **Delete**.



☐ Click **Yes**

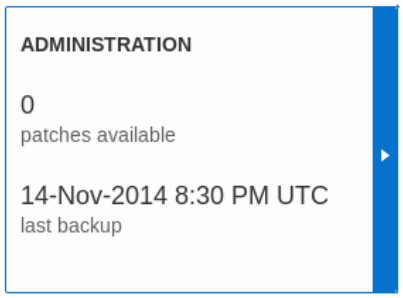
☐ Now click **Activate Changes**.

☐ Verify that the **AlphaProductCatalog** application is NOT working by entering the URL used previously in the lab. This is the URL that was copied as a bookmark.

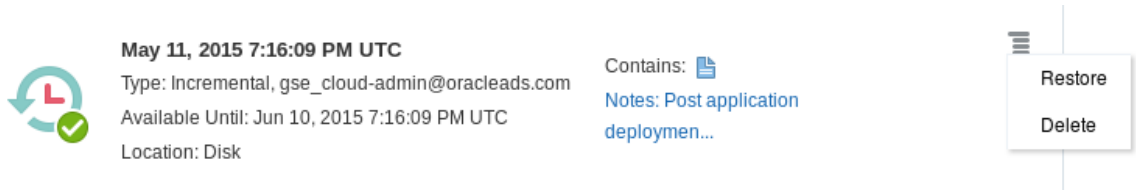


STEP 3: Restore Java Cloud Service from Backup

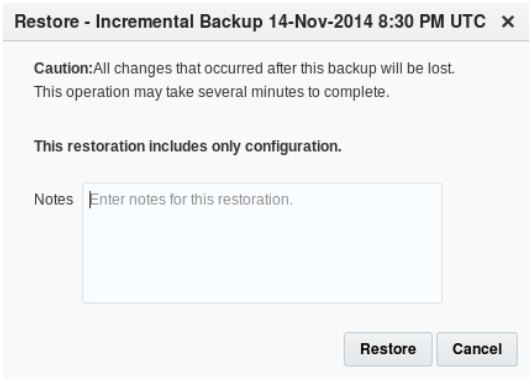
☐ Back on the JCS instance dashboard. Click on **ADMINISTRATION**



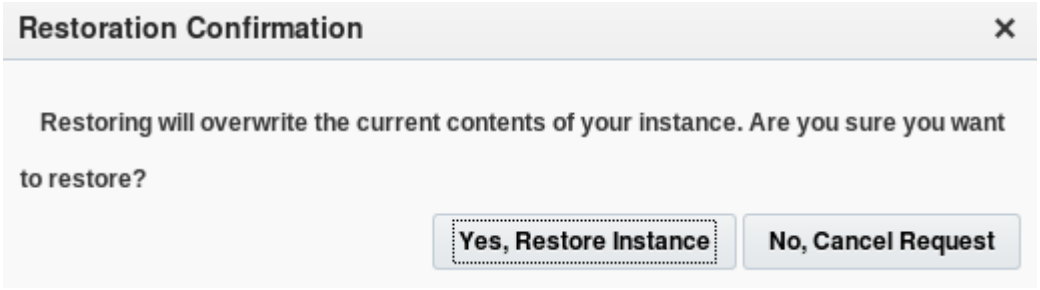
☐ On your most recent backup, click and select **Restore**.



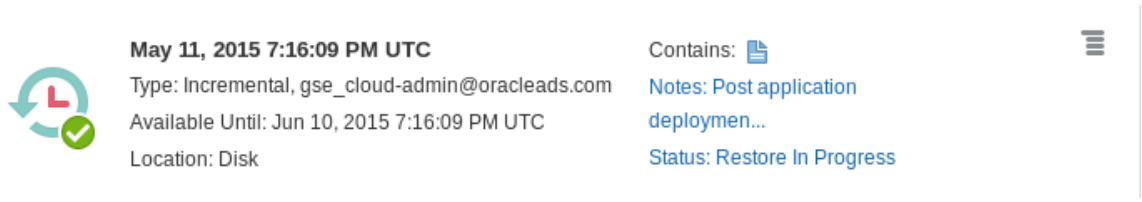
☐ Click the **Restore** Button



☐ On final confirmation screen click **Yes, Restore Instance**



☐ Click refresh to monitor the progress. Restore may take more than **20** minutes.

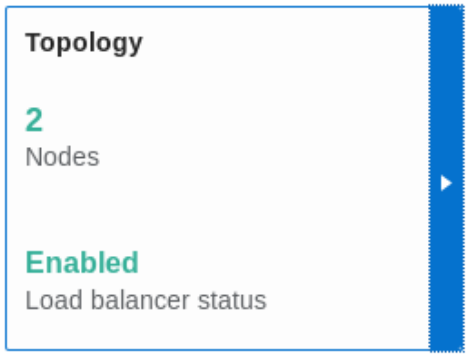


☐ Once the restore is completed, verify that the **AlphaProductCatalog** application is working by entering the URL used previously in the lab to accesses the Product Catalog REST APIs. This is the URL that was copied as a bookmark.

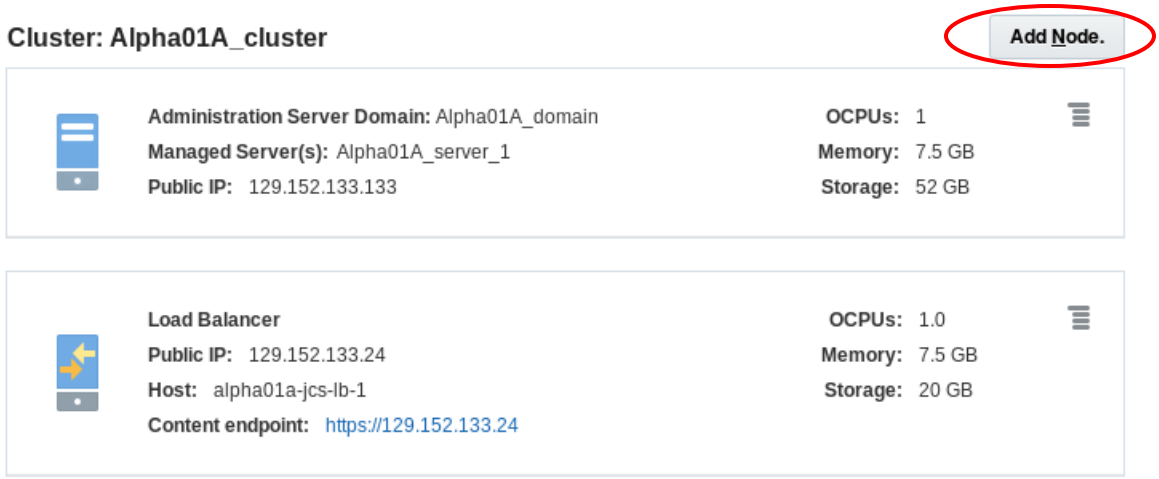
Request Additional Nodes

STEP 4: Request Additional WebLogic Managed Server

☐ Click on **TOPOLOGY** Group to initiate the Scale-up activity. **Make note** that there are **2 nodes** in the Topology and the Load Balancer is enabled.



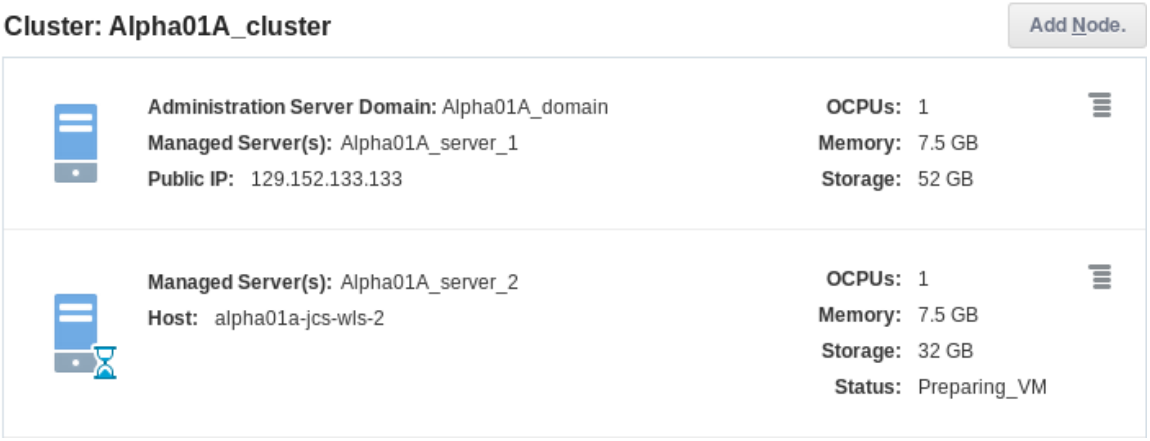
☐ Click **Add Node** to add another managed server to the **Alpha01A_cluster**



☐ Click on the **Add Node** button to start the process.

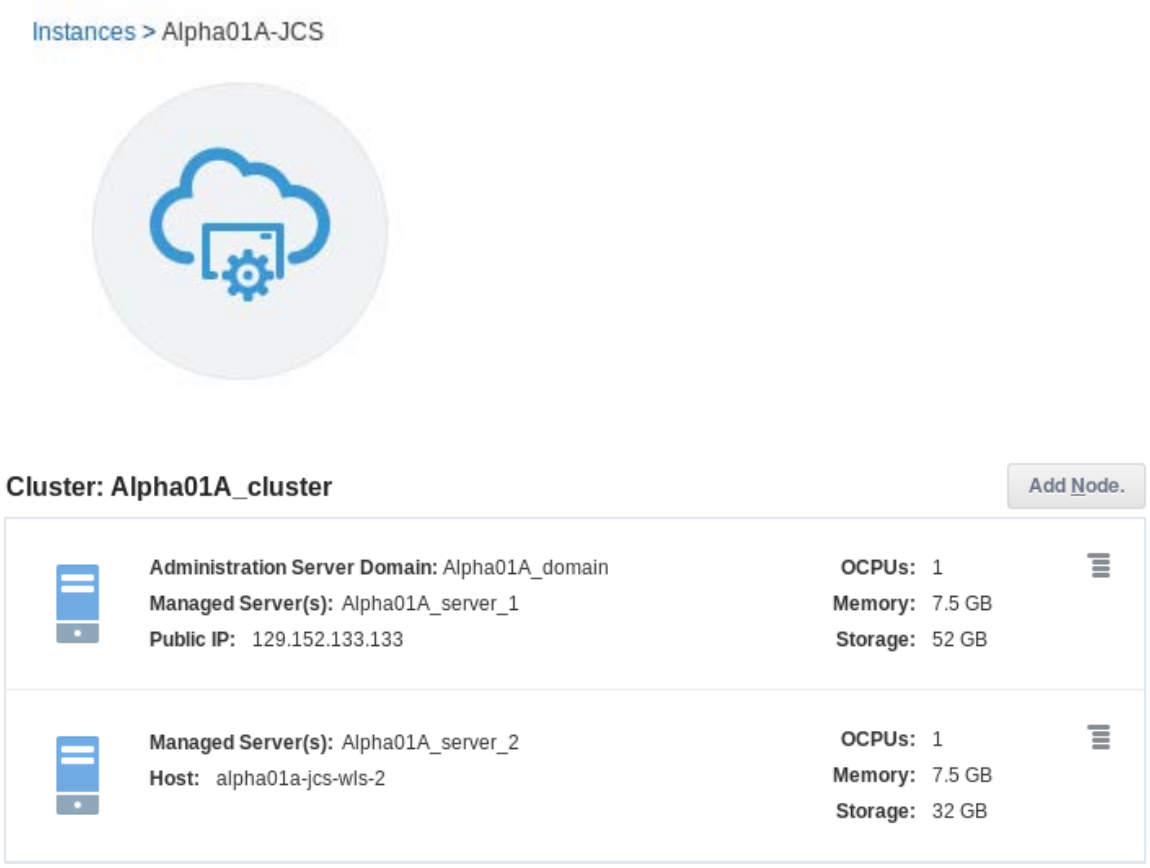
☐ Expand the **Activity** list, and you will now see that the status has changed to **In Progress**

☐ Click refresh to monitor the progress.

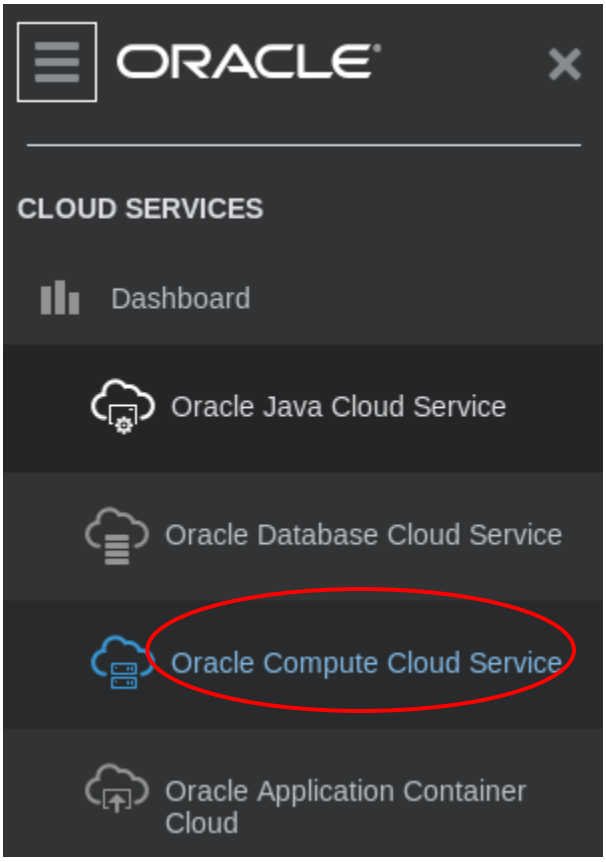


☐ Continue to monitor the progress and wait until the Topology indicates that there are 3 Nodes, the Load Balancer is once again enabled, and the Alpha01A-JCS instances no longer contains the warning indicator in its icon. This process can take about **20** minutes.

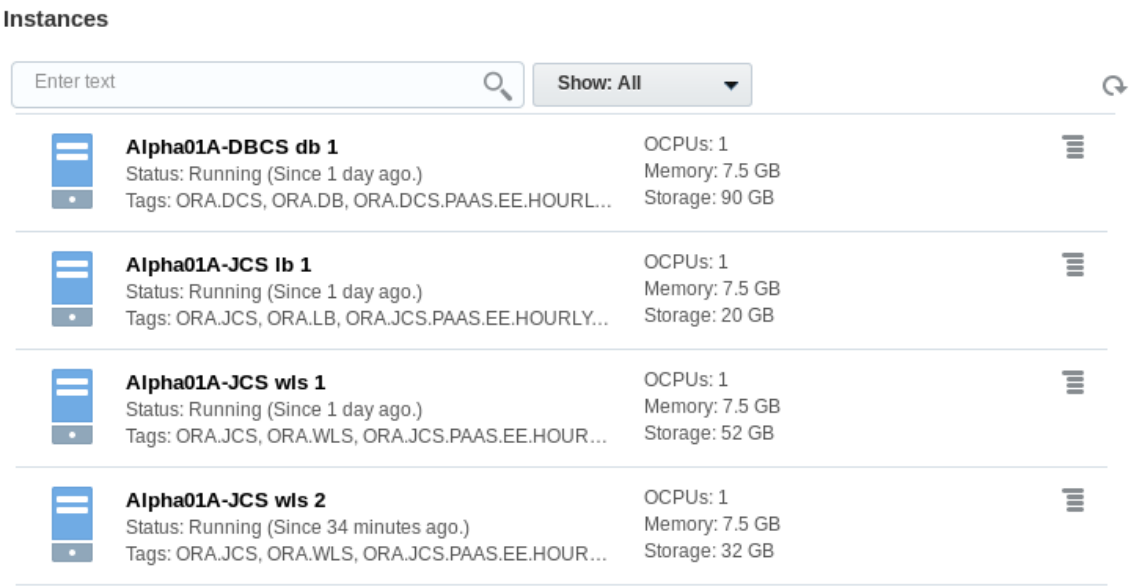
☐ Once the additional node has been added, the Alpha01A-JCS icon will return to normal.



☐ Now let's navigate to the Compute Cloud Service. From the **Consoles** dropdown select **Compute Cloud Service**.



☐ You will now see an addition virtual machine with the name **Alpha01A-JCS wls 2**



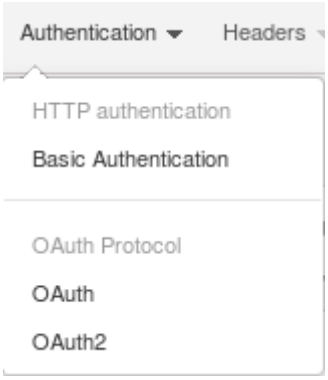
Remove nodes

STEP 5: Remove newly create WebLogic Managed Server

☐ Removing a node can also be done via the Cloud UI. However, we are going to remove the node using REST APIs, so that you can get an understanding of how to access the operational features programmatically.

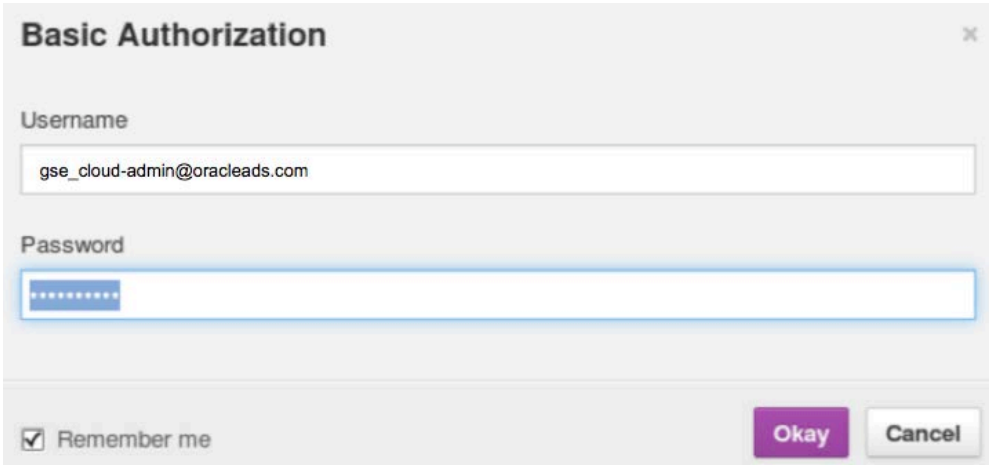
☐ In Firefox open the REST Client. Click on  in the far left to open REST Client application.

☐ First we will send a GET request to view all the server details. Click **Authentication** and select **Basic Authentication**

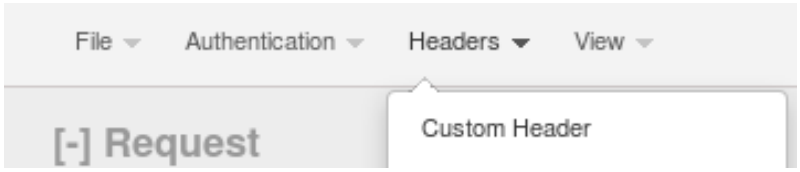


☐ Enter the following information and click **Okay**

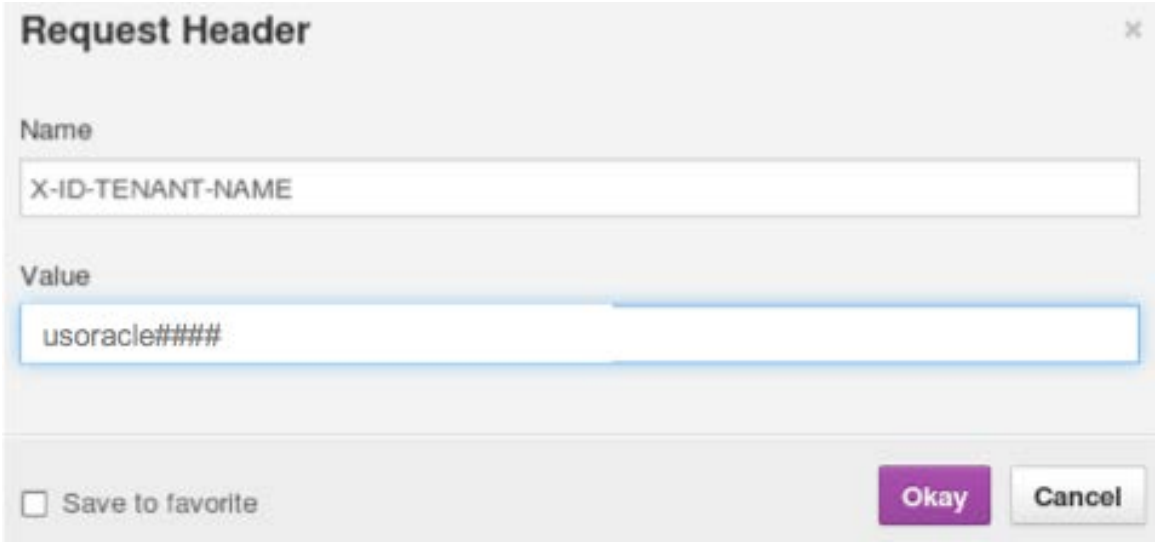
```
Username = <your Account user name >
Password = <your password>
```



☐ Next we will add a custom header property. Click **Headers** in drop down, and select **Custom Header.** Enter the following information and click **Okay**

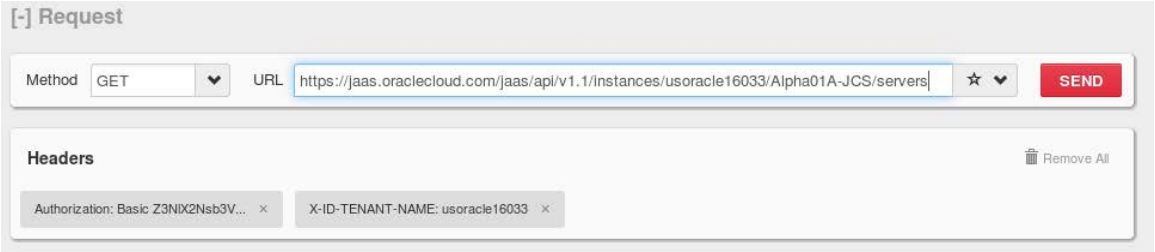



```
Name = X-ID-TENANT-NAME
Value = <your domain Id>
```

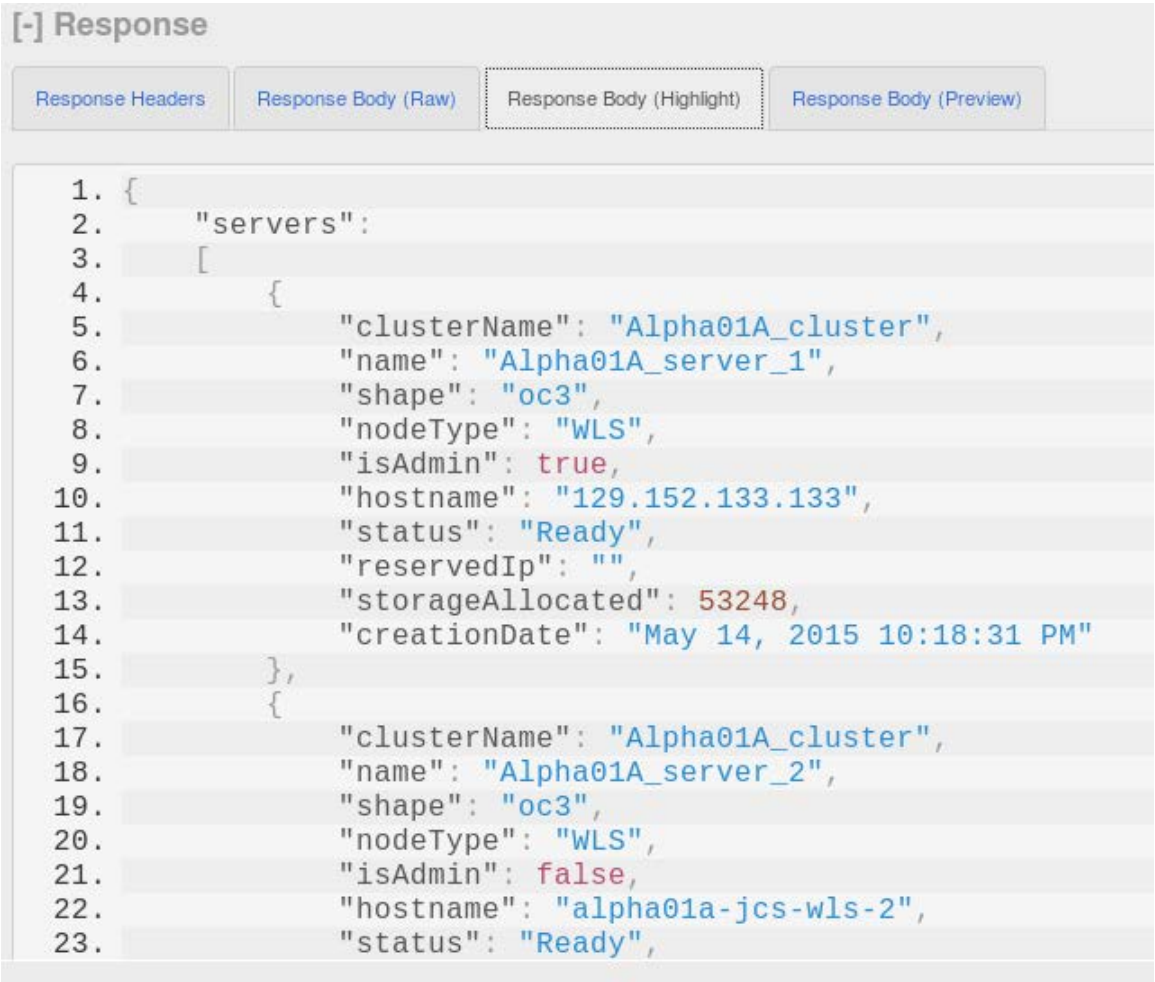


☐ Now enter the following URL and click **Send**.

```
https://jaas.oraclecloud.com/jaas/api/v1.1/instances/<your domain Id>/Alpha01A-JCS/servers
```



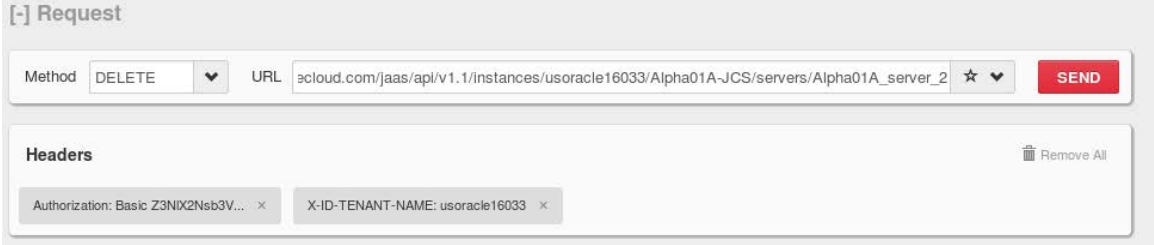
☐ Click on **Response Body (highlight)** to see the results.




```
1. {
2.     "servers":
3.     [
4.         {
5.             "clusterName": "Alpha01A_cluster",
6.             "name": "Alpha01A_server_1",
7.             "shape": "oc3",
8.             "nodeType": "WLS",
9.             "isAdmin": true,
10.            "hostname": "129.152.133.133",
11.            "status": "Ready",
12.            "reservedIp": "",
13.            "storageAllocated": 53248,
14.            "creationDate": "May 14, 2015 10:18:31 PM"
15.        },
16.        {
17.            "clusterName": "Alpha01A_cluster",
18.            "name": "Alpha01A_server_2",
19.            "shape": "oc3",
20.            "nodeType": "WLS",
21.            "isAdmin": false,
22.            "hostname": "alpha01a-jcs-wls-2",
23.            "status": "Ready",
```

☐ Now change the Operation from **GET** to **DELETE** and add the specific server to remove at the end of the URL. Click **SEND**

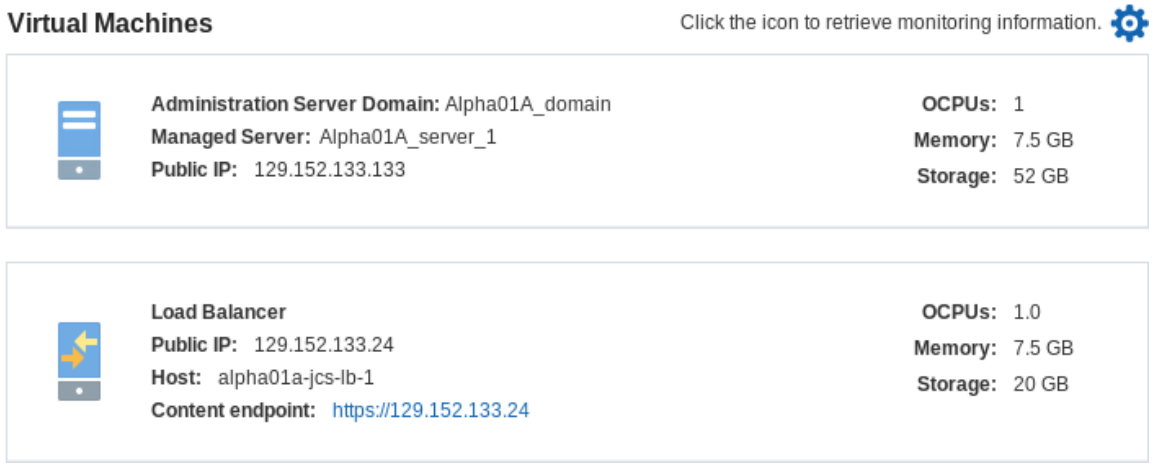
```
https://jaas.oraclecloud.com/jaas/api/v1.1/instances/<your domain Id>/Alpha01A-JCS/servers/Alpha01A_server_2
```



☐ Click on **Response Body (highlight)** to see the results.

☐ Return to the Java Cloud Service dashboard, and you will see that the service is in Maintenance mode as the node is being removed.

☐ After several minutes, the Alpha01A-JCS will no longer be in Maintenance mode, and the node will be removed from the instance dashboard.



☐ This Lab is completed