

Configuring the required set-up on Hoang's Oracle tenancy "rmitcodedcomputing"

1. Log on to the account as a federated user of the tenancy account. I logged in using Hoang's administrator account.
2. To understand the difference between a federated user and a normal Oracle cloud user, please read the contents on the below given web page link:
<https://docs.cloud.oracle.com/en-us/iaas/Content/Identity/Concepts/federation.htm>
3. Follow the steps as per the web page (refer to the link below for details):
<https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Tasks/addingusers.htm>
 - a. Create a sandbox compartment (Our compartment is named RSSandbox)
 - b. Create an Oracle cloud infrastructure group (Our group is RSSandboxGroup)
 - c. Create a policy to grant all members of the RSSandboxGroup full permissions on the compartment RSSandbox. Policy is a rule/set of rules that grants members of a certain group access to resources under a compartment in the cloud. The administrator needs to do this for all the user accounts created. Please see the links below to understand about policies and how to set them:

<https://docs.cloud.oracle.com/en-us/iaas/Content/Identity/Concepts/policygetstarted.htm>

<https://docs.cloud.oracle.com/en-us/iaas/Content/Identity/Concepts/commonpolicies.htm>

- d. Create Oracle identity cloud service group (Our IDCS group is IDCS_RSSandboxGroupn)
- e. Map the Oracle Identity Cloud Service group to the Oracle Cloud Infrastructure group that was created. The mapping gives the members of the IDCS group the permissions that are granted to the OCI group.

See below the screenshot showing the mapped OCI and IDCS groups (highlighted):

The screenshot displays the Oracle Cloud console interface. On the left, a sidebar shows navigation options: Users, Groups, and Group Mappings. The main content area is titled 'OracleIdentityCloudService' and includes a green 'IDP' logo with the word 'ACTIVE' below it. Below the logo, there are buttons for 'Edit Provider Details', 'Reset Credentials', 'Add Tags', and 'Delete'. The 'Identity Provider Information' tab is selected, showing details such as OCID, creation date, and description. The 'Groups' section is expanded, showing a table with the following data:

Group Name	Status	Description	OCI Mapped Group	Created
OCI_Admins	Active	Group mapped to the Administrators group in the OCI account	Administrators	Thu, Feb 13, 2020, 23:07:26 UTC
IDCS_Admins	Active	IDCS Group with Administrator privileges	-	Sat, Feb 15, 2020, 05:36:11 UTC
IDCS_RSSandboxGroup	Active	Oracle Identity Cloud Service Group for the RSSandboxGroup	RSSandboxGroup	Tue, Jun 16, 2020, 10:59:28 UTC

The 'IDCS_RSSandboxGroup' and 'RSSandboxGroup' rows are highlighted in yellow. At the bottom of the table, it says '0 Selected' and 'Showing 3 items < Page 1 >'.

- f. This mapping is mandatory since the users are federated users attached to Oracle identity cloud service. Remember we had already created IDCS 'Users' (for Hoang, me and Nhi).

- g. Each user is to be added to the IDCS group that we created (IDCS_RSSandboxGroupn).
- h. After this is done, the Oracle Identity Cloud Service group mapped to the Oracle Cloud Infrastructure group is now listed in the Console on the Users page.

Below is the screenshot of the user details page of the user 'lakshmi.jmohan@gmail.com'.

The screenshot shows the Oracle Cloud console interface. At the top, there's a search bar and navigation links. The main content area displays the user details for 'lakshmi.jmohan@gmail.com'. On the left, there's a green circular icon with a white 'U' and the word 'ACTIVE' below it. To the right of the icon, there's a blue information box with a link to assign API keys. Below this, there are buttons for 'Edit', 'Reset Password', 'Manage Roles', and 'Delete'. The 'User Information' section shows the user's name, ID, email, and creation date. The 'Groups' section shows a table with one group, 'IDCS_RSSandboxGroup', which is described as 'Oracle Identity Cloud Service Group for the RSSandboxGroup'.

4. After this step, all the users can login and see the sandbox compartment that they have been assigned (RSSandbox). Users can view, create, and manage resources in the Sandbox compartment.
5. Roles can be configured for the group. This means that group members can get access to some Oracle cloud services based on the role granted by the administrator. This can be done for each user by clicking on the 'Manage roles' button on users page. Users can be granted access to services and instances.
6. We can set quota limits for compartment that determine the maximum number of resources that users in that compartment can use. Please see the below page for details:

<https://docs.cloud.oracle.com/en-us/iaas/Content/General/Concepts/resourcequotas.htm>

The below screenshot shows a quota policy that sets the quota for type vm-standard-e2-8-count compute instances to 30 in each availability domain on compartment RSSandbox.

The screenshot shows the Oracle Cloud console interface for the 'RSSandbox-quota' page. On the left, there's a green circular icon with a white 'Q' and the word 'ACTIVE' below it. To the right of the icon, there's a blue information box with a link to assign API keys. Below this, there are buttons for 'Edit', 'Delete', and 'Add Tags'. The 'Quota Information' section shows the quota's description, OCID, and creation date. The 'Statements' section shows a table with one statement, 'set compute quota vm-standard-e2-8-count to 30 in compartment RSSandbox'.

7. Administrator can request for additional resources that will increase their service limit. The screenshot shows the compute service quotas available currently in the compartment RSSandbox on our tenancy. Highlighted is the link to request an increase in quota limit.

Limits, Quotas and Usage

Your tenancy has [limits](#) on the maximum number of resources you're allowed to use. You can use [quotas](#) to allocate resources to compartments. If you're an administrator in an eligible account, you can [request a service limit increase](#).

SERVICE: Compute **SCOPE**: [wgl:AP-MELBOURNE-1-AD-1](#) **RESOURCE**: Select... **COMPARTMENT**: RSSandbox

Description	Limit Name	Service Limit	Usage	Available
BM.Dense.O1.36	bm-dense-01-36-count	0	0	0
BM.Dense.O2.52	bm-dense-02-52-count	0	0	0
BM.GPU2.2	bm-gpu2-2-count	0	0	0
BM.GPU3.8	bm-gpu3-8-count	0	0	0
BM.HPC2.36	bm-hpc2-36-count	0	0	0
BM.Standard.B1.44	bm-standard-01-44-count	0	0	0
BM.Standard.E2.64	bm-standard-02-64-count	0	0	0
BM.Standard.O1.36	bm-standard01-36-count	0	0	0
BM.Standard.O2.52	bm-standard02-52-count	0	0	0
DVH.Standard.O2.52	dvh-standard02-52-count	0	0	0
Cores for Standard E3 Flex and BM.Standard.E3.128 Instances	standard-e3-core-a0-count	0	0	0
VM.Dense.O1.16	vm-dense-01-16-count	0	0	0
VM.Dense.O1.4	vm-dense-01-4-count	0	0	0
VM.Dense.O1.8	vm-dense-01-8-count	0	0	0

8. To create an instance from user login, follow the steps as mentioned in the link below:

<https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Reference/overviewworkflow.htm>

- Create key-pair
 - Create compartment
 - Create Virtual Cloud Network (VCN) (it gets assigned automatically for us in our chosen compartment)
 - Launch Linux instance
 - Connect to the instance
 - Add block volume (optional step, but good to know)
 - Clean up resources
9. Try logging on to the instance using SSH key pair. Please refer to the earlier tutorial on instance creation.
10. I created two instances in our compartment RSSandbox. One (named *sandmaster*) from Hoang's user login and the other (named *test*) from my user login. Given below are the screenshots of the resources in the compartment from two user logins.

User: Hoang

The screenshot shows the Oracle Cloud console interface for User: Hoang. The top navigation bar includes the Oracle Cloud logo, a search bar, and the region 'Australia Southeast (Melbourne)'. The left sidebar lists various compute services, with 'Instances' selected. The main content area displays 'Instances in RSSandbox Compartment'. A table lists two running instances: 'test' and 's102c430t'. The 'test' instance has a public IP of 168.138.13.187 and is in availability domain AD-1. The 's102c430t' instance has a public IP of 168.138.3.150 and is also in AD-1. A 'Create Instance' button is visible above the table. On the right, a 'Profile' sidebar shows the user's email 'o3actidentity@o3services.com', tenancy 'rmitedcoding', and a 'Sign Out' link.

Name	Status	Public IP	Shape	Availability Domain	Fault Domain	Create
test	Running	168.138.13.187	VM.Standard2.1	AD-1	FD-2	Wed, Jun 16, 2020, 11:23:06 UTC
s102c430t	Running	168.138.3.150	VM.Standard2.1	AD-1	FD-1	Tue, Jun 16, 2020, 11:23:06 UTC

User: Lakshmi

The screenshot shows the Oracle Cloud console interface for User: Lakshmi. The layout is identical to the previous screenshot, showing the 'Instances in RSSandbox Compartment' table with two running instances: 'test' and 's102c430t'. The 'Profile' sidebar on the right shows the user's email 'o3actidentity@o3services.com', tenancy 'rmitedcoding', and a 'Sign Out' link.

Name	Status	Public IP	Shape	Availability Domain	Fault Domain	Create
test	Running	168.138.13.187	VM.Standard2.1	AD-1	FD-2	Wed, Jun 16, 2020, 11:23:06 UTC
s102c430t	Running	168.138.3.150	VM.Standard2.1	AD-1	FD-1	Tue, Jun 16, 2020, 11:23:06 UTC

Miscellaneous

Getting help with Oracle cloud team:

<https://docs.cloud.oracle.com/en-us/iaas/Content/GSG/Tasks/contactingsupport.htm?Highlight=support%20identifier>