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| Oracle SOA Cloud Service WorkshopLab 1 – Pre-Requisites for SOACS Provisioning |

# Pre-Requisites for SOACS

Before we go to the SOA Cloud Service console, let’s take care of some of the pre-requisites to get ready to provision a new SOA environment. Here are the tasks that we need to take care of before we can provision a service:

1. **Create a public key/private key pairs** if we don’t have one already (you may want 1 for DBCS and another for SOACS depending on who will be accessing the environments) – These are for VM shell access via SSH, so that you can view log files, modify startup scripts, install custom Java classes, etc..
2. **Create storage containers** in Oracle Storage Cloud Service for the DBCS and SOACS instances – These are required for the built in backup/restore capabilities of SOACS and DBCS
3. **Create a DBCS instance** – Used for the SOA Dehydration Store/MDS/OWSM Policy Store/OPSS

Once these pre-requisites are taken care of, we will create the new SOACS instance.

# Public Key/Private Key Pair

I’ve provided a Public Key/Private Key pair for the training. If you do want to create a new one, or for reference in the future, here is a [link to the documentation](http://www.oracle.com/webfolder/technetwork/tutorials/obe/cloud/javaservice/JCS/JCS_SSH/create_sshkey.html) tutorial for how to do this. This allows you to login to the VM via SSH. The provided keys are in the wiki that we are using for the class found [here](https://stbeehive.oracle.com/teamcollab/library/st/ICS+GotoMarket/Public+Documents/SOACS/HandsOnTraining) and should be downloaded to your local PC (for easier cut/paste to a different browser : <https://stbeehive.oracle.com/teamcollab/library/st/ICS+GotoMarket/Public+Documents/SOACS/HandsOnTraining> )

**File names:**

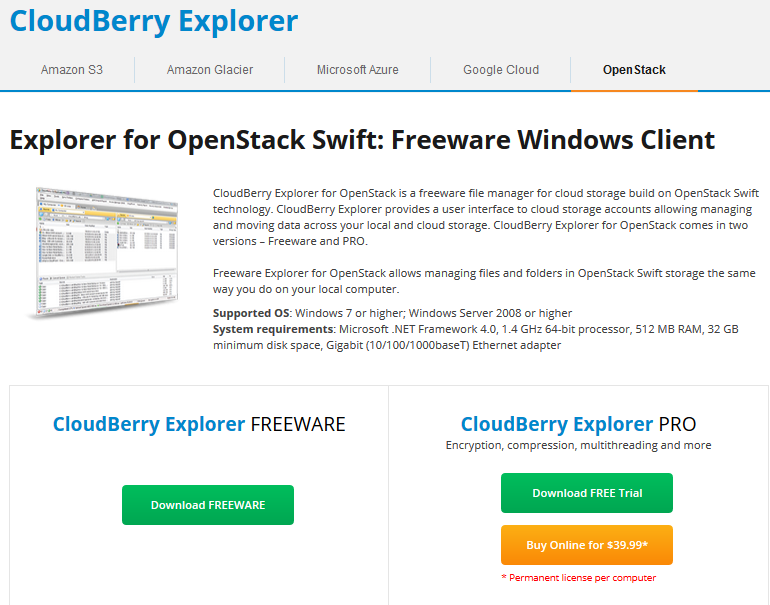
Public Key: [soacs\_training\_rsa.pub](https://stbeehive.oracle.com/content/dav/st/ICS%20GotoMarket/Public%20Documents/SOACS/HandsOnTraining/soacs_training_rsa.pub)

Private Key: [soacs\_training\_rsa.ppk](https://stbeehive.oracle.com/content/dav/st/ICS%20GotoMarket/Public%20Documents/SOACS/HandsOnTraining/soacs_training_rsa.ppk)

# Storage Service Creating Containers

Now, let’s create the storage containers that are required for the built in backup functionality of DBCS and SOACS. Backups allow you to save your domain and database, and then restore at a future time if something goes drastically wrong. There are several options for creating storage containers. Basically, it is a REST based interface. We’ve found CloudBerry to be the easiest option, and that is what we’ll lead you through here, but there are also links to direct REST commands from a linux server, referenced in the docs, and you could also try using a REST client plug-in in the browser, or a PC Rest client. We recommend CloudBerry for simplicity.

[Download CloudBerry](http://www.cloudberrylab.com/free-openstack-storage-explorer.aspx) – this is the easiest way to create Storage Containers.



Other options if you don’t want to use Cloudberry:

Google for “CyberDuck” and download for the Mac….look for “Openstack Swift” version.

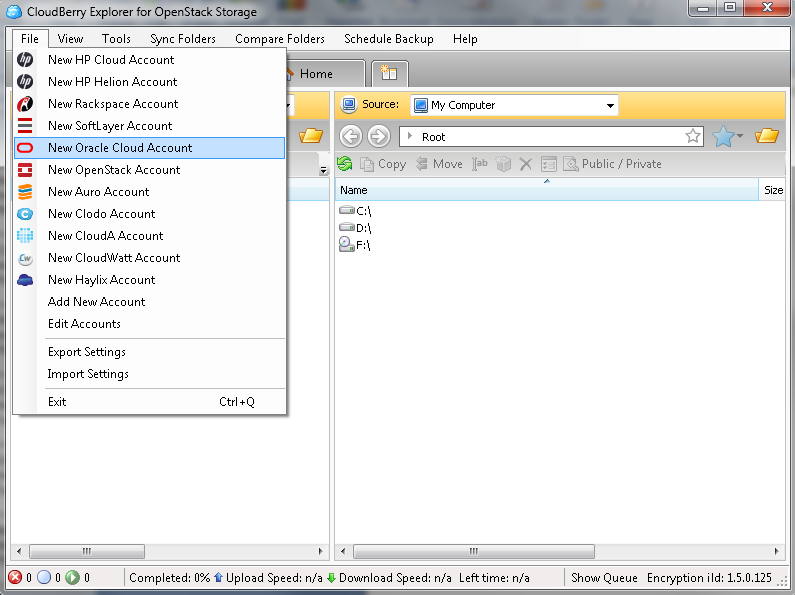
https://trac.cyberduck.io/wiki/help/en/howto/oraclecloud

[OBE for using direct REST commands](http://www.oracle.com/webfolder/technetwork/tutorials/obe/cloud/objectstorage/creating_containers_REST_API/creating_containers_REST_API.html) – This is the most “Developer centric” way

[Documentation link for Storage Service](https://apexapps.oracle.com/pls/apex/f?p=44785:112:0::::P112_CONTENT_ID:10888)

Here are the details you should use when creating the containers in CloudBerry. First launch CloudBerry, and the first step will be to create a new connection to your identity domain.

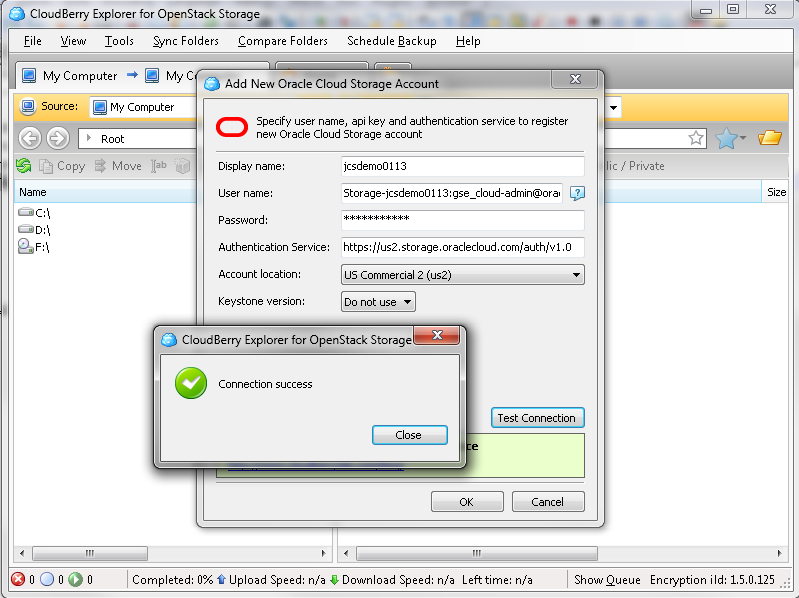
Click on the **File** Menu, and select **New Oracle Cloud Account**



Enter the following Information into the dialogue window:

|  |  |
| --- | --- |
| Field Name | Value |
| Display Name | jcsdemo0### (where ### is your demo instance number)  e.g. *jcsdemo0113* |
| User Name | Storage-jcsdemo0###:gse\_cloud-admin@oracleads.com (where ### is your demo instance number)  e.g. *Storage-jcsdemo0113:gse\_cloud-admin@oracleads.com* |
| Password | Use the weekly password from GSE (demo.oracle.com – launchpad)  e.g. *Welcome1* |
| Authentication Service | If your replication policy is Ashburn, use us6 (Ashburn) instead of us2 (Chicago) in this URL. For Europe, use em1, em2, em3, or em4. Go to storage service in the My Services Page, and click on details, and then expand the top of the screen to find the replication policy setting. If you use the wrong prefix, the connection will work, but the storage container creation will fail. |

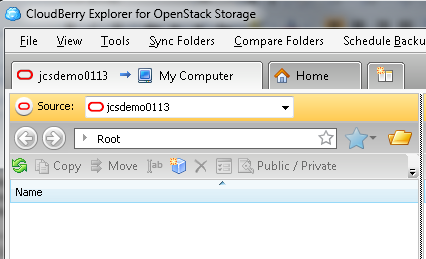
Click on **Test Connection** when ready and look for the **Connection Success** message.



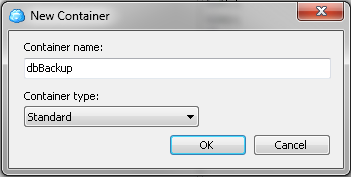
Click on **Close** and then **OK**.

**Close** the next dialogue. This shows you all of your configured accounts.

Select your new account on the Source panel : e.g. **jcsdemo0113** and then Click on the **Create Container Icon** : 

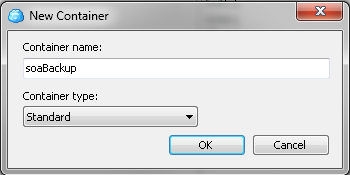


Enter **dbBackup** as the new container name. Leave other options as default (Standard Container) and click **OK** :

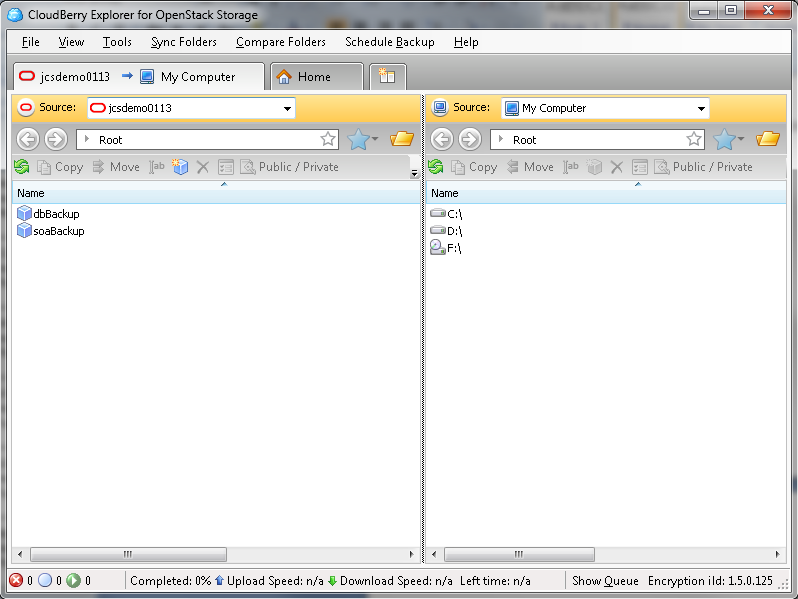


*This has created a new container for the Database backups. Now, we will do the same for the SOA Backups.* Click on the Create Container icon again: 

Enter **soaBackup** as the new container name, and click **OK**.



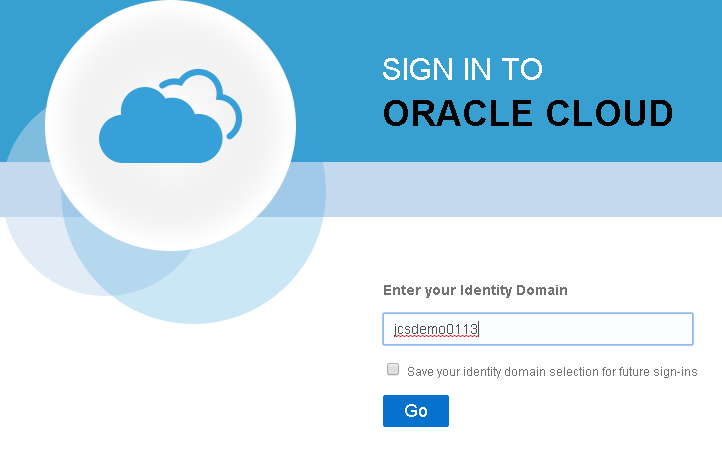
Now, you can see your two new containers in the source view, and these are now ready to be used by our new DBCS and SOACS instances once we provision them. We’ll use the information from these creation steps later in the provisioning screens. BTW: you can use CloudBerry to inspect backups, download them to your PC, or you can even upload files from your PC into the backup container, just like you would do in file explorer.



# Create DBCS Instance for SOACS

Sign into your Services Console at <https://myservices.us.oraclecloud.com/> using your Identity Domain : jcsdemo0### (where ### is your id domain number)

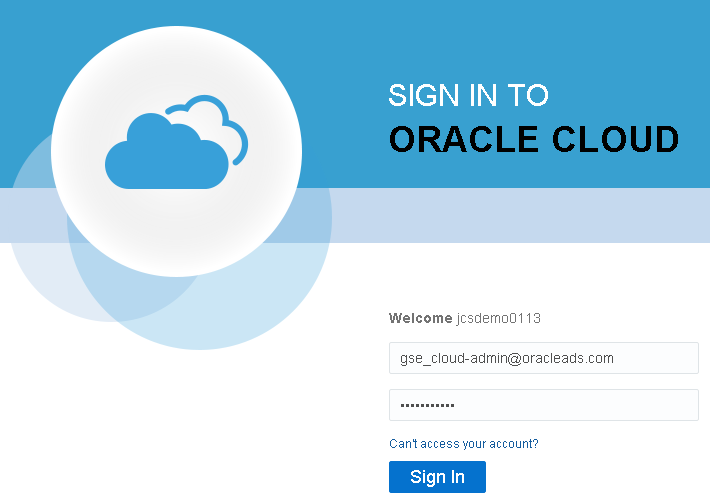
e.g. : jcsdemo0113



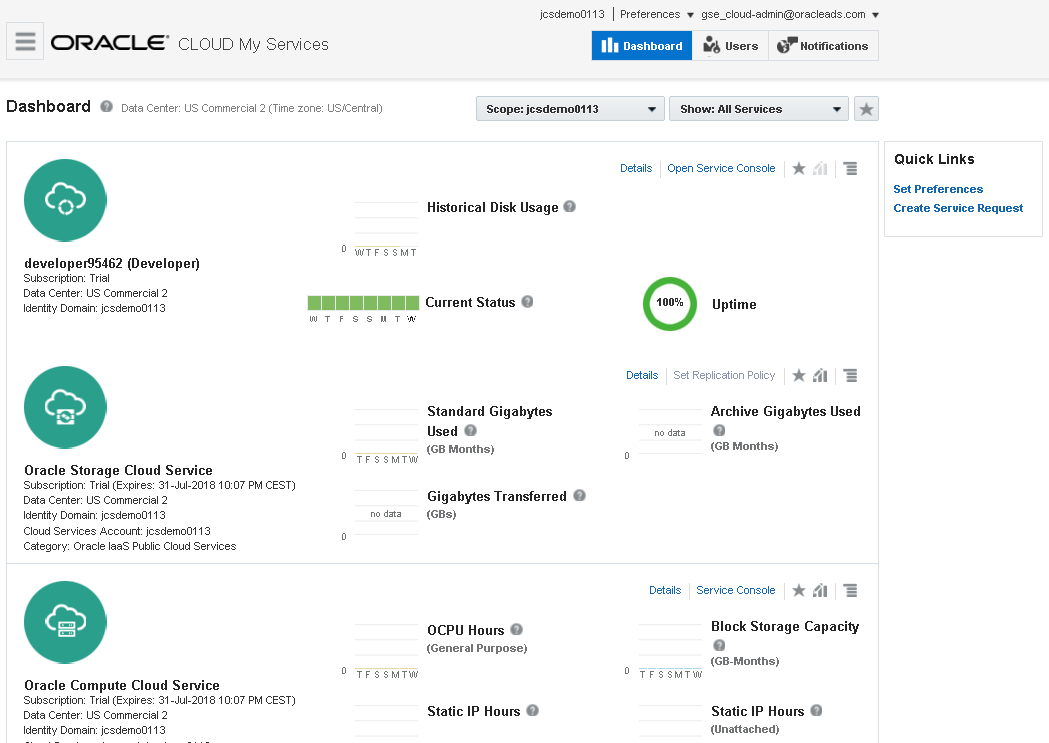
Enter your user name and password. These can be found on demo.oracle.com in the launchpad.

User: [gse\_cloud-admin@oracleads.com](mailto:gse_cloud-admin@oracleads.com)

Pass: use Launchpad in demo.oracle.com



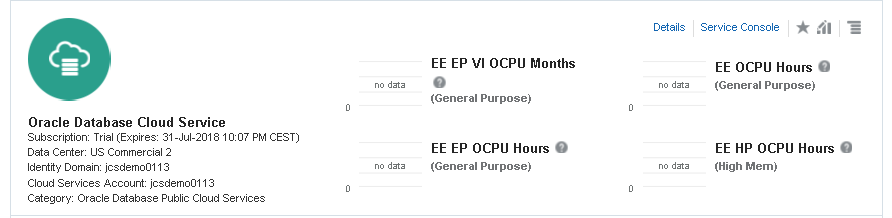
SOA Cloud Service is bundled with the Java Cloud Metered Bundle, so you will notice that you can choose to use your Java Credits for either Java Cloud Service or SOA Cloud Service or both. API Manager is an option that we will see in the SOA Cloud Service as well.



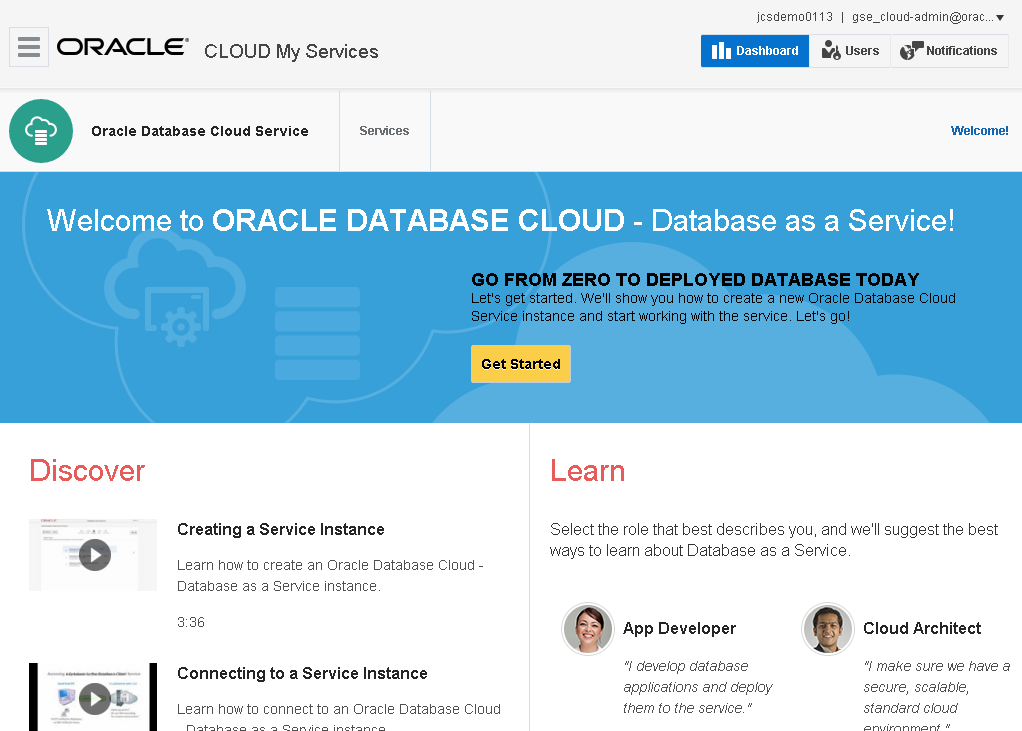
Other Services that you should take note of:

* Database Cloud Service – Used for SOA/API Manager database
* Storage Cloud Sevice – Used for backups of SOA/API Manger services
* Developer Cloud Service – A free service that gives you git source code management, code review tools/processes, and Hudson/maven continuous build capabilities.
* Compute Cloud Service – Provides the foundation for the other PaaS services by provisioning the VM, Local Block Storage, and Network resources. JCS, DBCS, and SOACS run on top of Compute.

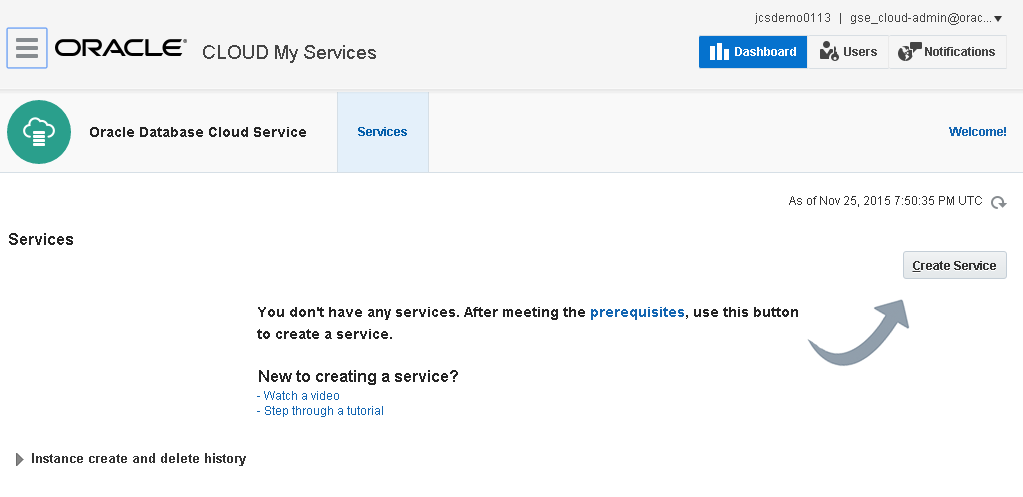
Find the Database Cloud Service and click on the **Service Console** link.



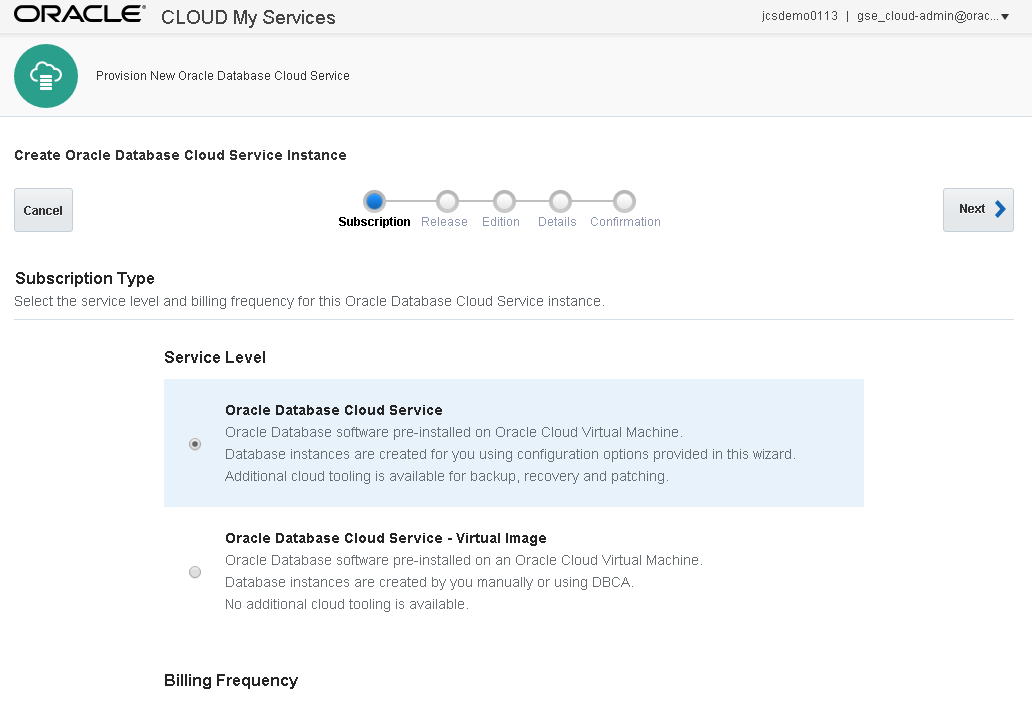
Click on the **Services** link



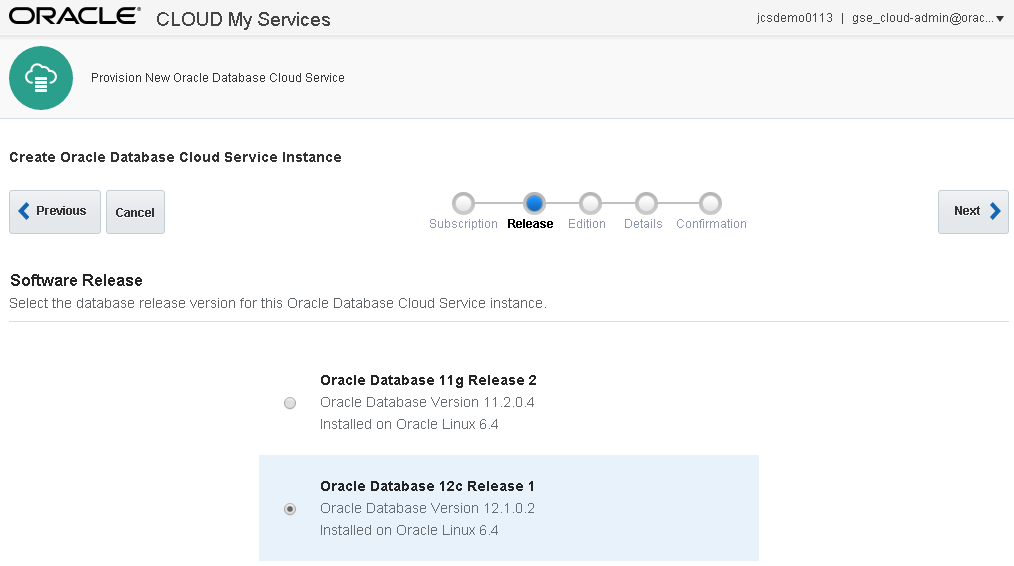
Click on **Create Service**



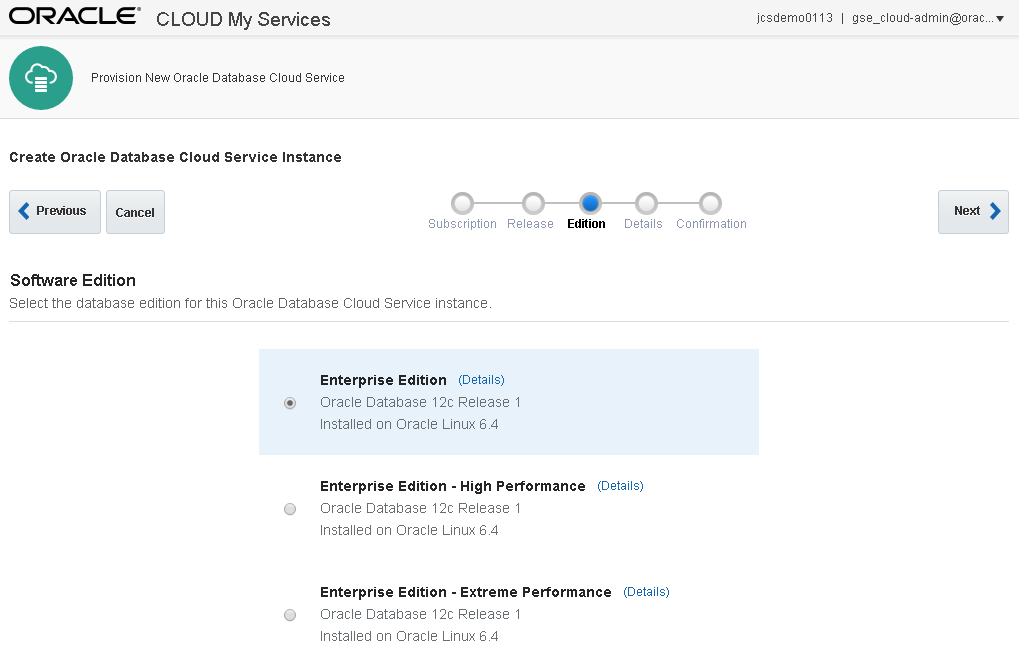
Select **Database Cloud Service** without the Virtual Image option and **Monthly billing** frequency (trials don’t matter, so Hourly is fine also) and then click **Next** :



Select **12c**. Click **Next**

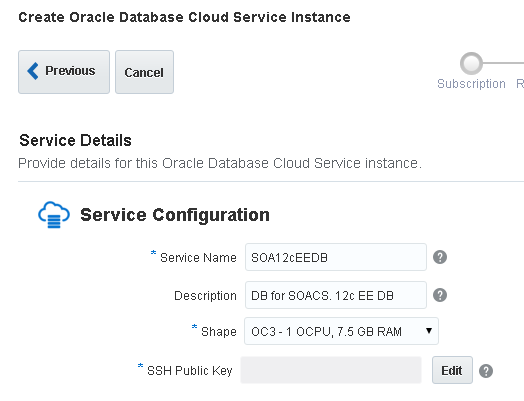


Select any Edition. **Enterprise Edition** is fine. All Editions are supported with SOACS. Click **Next**

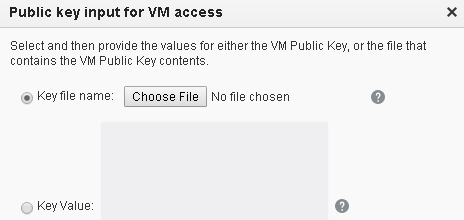


Enter the following into the wizard and the click on the Edit button to upload your public key:

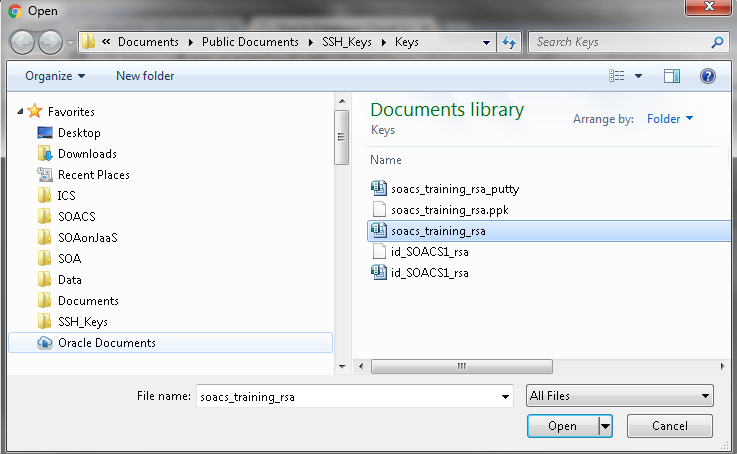
|  |  |
| --- | --- |
| Field | Value |
| Service Name | SOA12cEEDB |
| Description | DB for SOACS. 12c EE DB |
| Shape | Select OC3 to save on quota |
| SSH Public Key | Use your public key in openSSH format, or to use the provided key: soacs\_training\_rsa.pub (from your PC) [Wiki link](https://stbeehive.oracle.com/content/dav/st/ICS%20GotoMarket/Public%20Documents/SOACS/HandsOnTraining/soacs_training_rsa.pub), FYI: [Private Key Wiki Link](https://stbeehive.oracle.com/content/dav/st/ICS%20GotoMarket/Public%20Documents/SOACS/HandsOnTraining/soacs_training_rsa.ppk) |



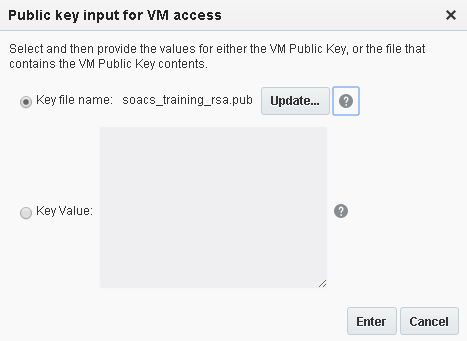
Click on **Choose File** to select the File from your local PC directory:



Navigate to the folder where you saved your key files, select **soacs\_training\_rsa.pub** and click **Open**:

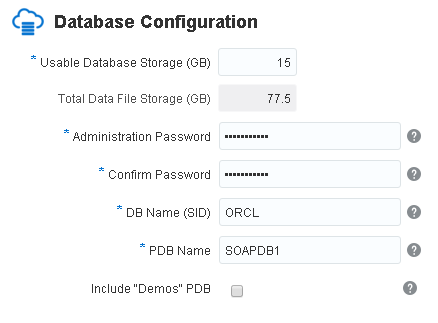


Click on Enter



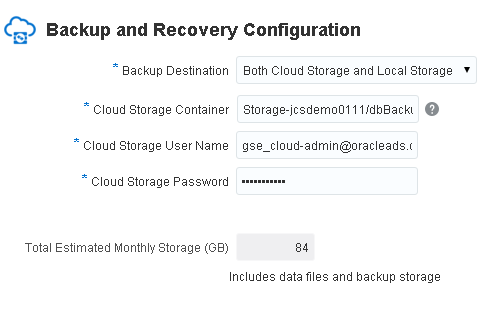
Enter the following values in the Database configuration section:

|  |  |
| --- | --- |
| Field | Value |
| Usable Database Storage (GB) | 15 |
| Administration Password & Confirm Password | Welcome\_789 |
| DB Name | ORCL *(default)* |
| PDB Name | SOAPDB1 |

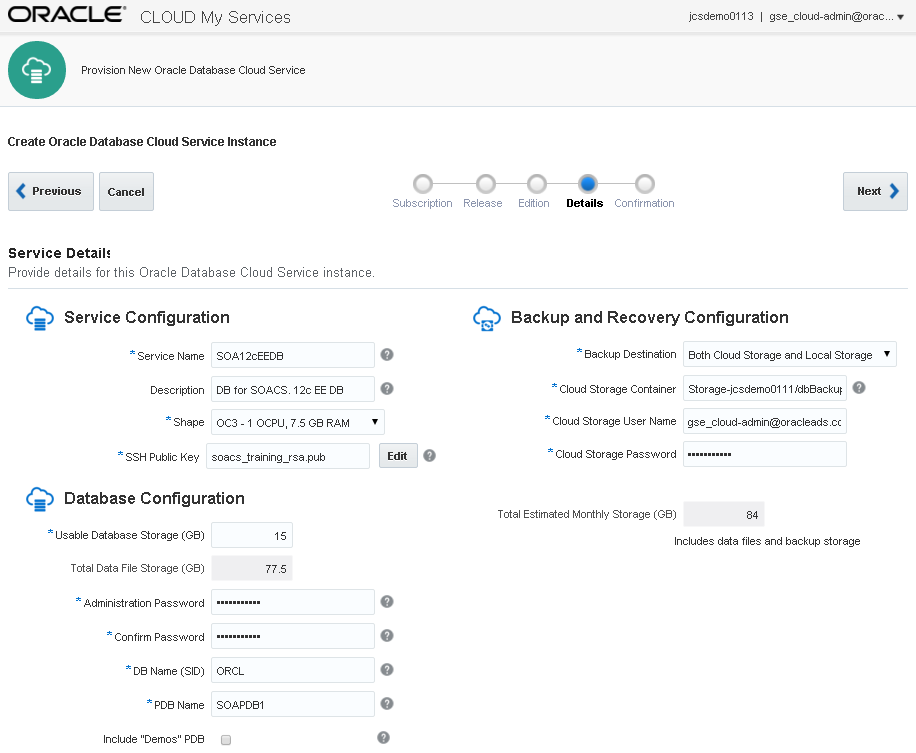


Enter the following Values into the **Backup and Recovery Configuration** Section

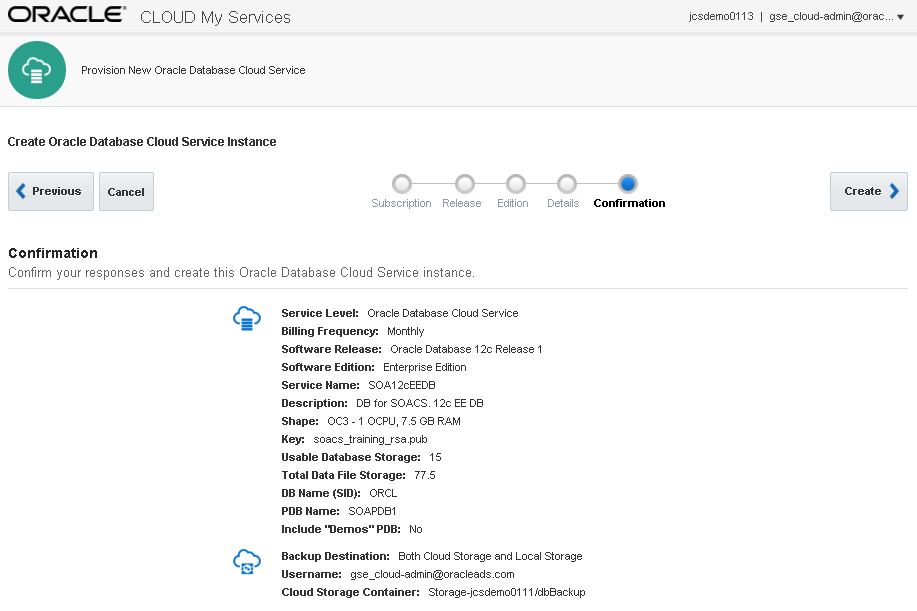
|  |  |
| --- | --- |
| Field | Value |
| Backup Destination | Always select **Both Cloud Storage and Local Storage** or else SOACS will fail to provision |
| Cloud Storage Container | Storage-jcsdemo0111/dbBackup |
| Cloud Storage User Name | gse\_cloud-admin@oracleads.com |
| Cloud Storage Password | Get from GSE Launchpad at demo.oracle.com |



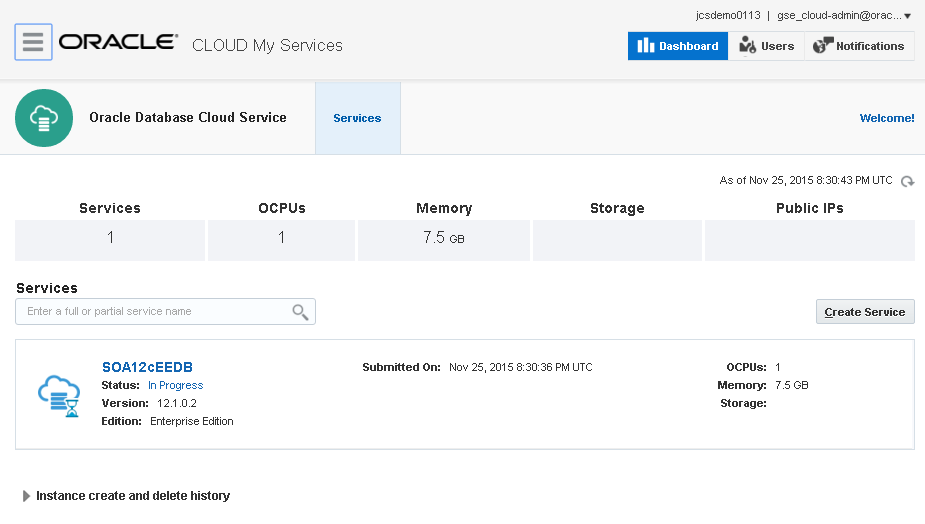
Click **Next**



Click on **Create** to accept your selections, or go back and correct anything you need to:



Note that the status is now **In Progress**. This will take 30-90 minutes to provision depending on the cloud performance at the time.



This concludes Lab 1.