Oracle announces “The Oracle Public Cloud Command-Line Interface”

Yes Oracle announced their much awaited OPC CLI utility. The Oracle Public Cloud Command-Line Interface is a utility to enable management of your cloud environment from the command line. The current release supports the ***Compute Service***, with additional service support coming in future releases. You can download it here for your supported platform.

Oracle Compute Cloud Service provides a comprehensive set of ***oracle-compute*** CLI commands that you can use to view and manage instances, manage storage and networking, and manage SSH keys. You can read the documentation here.

So, let’s look at the very common use case where we will install the CLI, setup the environment to work with Oracle Public Cloud Compute Services and then create an instance using launchplan.

There are two requirements to get it installed, you need to have ***Oracle Linux 6.7*** & ***Python 2*** (2.6.6 or later). Download the zip file from the link mentioned above and put that into a directory of your choice inside the machine where you want to launch it from.

As a prerequisite, you need to collect your authentication credentials for the Compute Cloud Service.

> The user name consists of two parts, in the following format:
>
> **/Compute-identity_domain/user**
>
> For example, if your identity domain is **usoracle52237** and the username in your account-creation email is **prasenjit.sarkar@oracle.com**, then the following would be the two-part user name that you must use for REST API calls:
>
> **/Compute-usoracle52237/prasenjit.sarkar@oracle.com**

- Download the zip file from OTN

```
[root@bitnami-rubystack-0d32 ~]# wget http://download.oracle.com/otn/java/cloud-service/opc-cli-1.0.0.zip
--2016-07-28 10:48:56--  http://download.oracle.com/otn/java/cloud-service/opc-cli-1.0.0.zip
Resolving download.oracle.com... 173.223.52.201, 173.223.52.193
Connecting to download.oracle.com|173.223.52.201|:80... connected.
HTTP request sent, awaiting response... 302 Moved Temporarily
Location: https://edelivery.oracle.com/akam/otn/java/cloud-service/opc-cli-1.0.0.zip [following]
--2016-07-28 10:48:57--  https://edelivery.oracle.com/akam/otn/java/cloud-service/opc-cli-1.0.0.zip
Resolving edelivery.oracle.com... 172.226.195.130
Connecting to edelivery.oracle.com|172.226.195.130|:443... connected.
HTTP request sent, awaiting response... 302 Moved Temporarily
Location: https://edelivery.oracle.com/osdc-otn/akam/otn/java/cloud-service/opc-cli-1.0.0.zip [following]
--2016-07-28 10:48:58--  https://edelivery.oracle.com/osdc-otn/akam/otn/java/cloud-service/opc-cli-1.0.0.zip
Reusing existing connection to edelivery.oracle.com:443.
HTTP request sent, awaiting response... 302 Moved Temporarily
Location: https://login.oracle.com/pls/orasso/orasso.wwsso_app_admin.ls_login?Site2pstoreToken=v1.2~CA55CD32~227
F5CBC3742AC42BEFFA49C4498369892161F61E426FF3AF9946F62D861450783E5B0E23052A46E1BB3F6379555A3CB769D04DE7D963D75706
56DC907F563687369365FC8A2A9EC697521F879B343AB79B4EE065D784D63F1726F220958229BF41E0A94F573A09A6682893BD8C64F34856
40B8FC3F3C440D798C22B94844025E0C78753DFF638D3569C5E8004D25D8D6B934AD3DCEFB3D53C3468B5F00029D7313E2DB466D430F2199
889727F6CD2138BF67EFB8CB52325DE1D04044FFB335FA6C71B89094CB5D73018C72D805B2C55410D [following]
--2016-07-28 10:48:58--  https://login.oracle.com/pls/orasso/orasso.wwsso_app_admin.ls_login?Site2pstoreToken=v1
297F87E42C9EE44F5CBC3742AC42BEFFA49C4498369892161F61E426FF3AF9946F62D861450783E5B0E23052A46E1BB3F6379555A3CB769D
3002AAB0B6C735356DC907F563687369365FC8A2A9EC697521F879B343AB79B4EE065D784D63F1726F220958229BF41E0A94F573A09A6682
73AD690FC8C0C3740B8FC3F3C440D798C22B94844025E0C78753DFF638D3569C5E8004D25D8D6B934AD3DCEFB3D53C3468B5F00029D7313E
D9475BB935FB263889727F6CD2138BF67EFB8CB52325DE1D04044FFB335FA6C71B89094CB5D73018C72D805B2C55410D
Resolving login.oracle.com... 10.230.86.136
Connecting to login.oracle.com|10.230.86.136|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2123 (2.1K) [text/html]
Saving to: “opc-cli-1.0.0.zip”

100%[=============================================================================================================>] 2,123       --.

2016-07-28 10:48:59 (18.3 KB/s) - “opc-cli-1.0.0.zip” saved [2123/2123]
```

- Unzip the CLI installation bundle.
- Install the RPM file. To ensure that all the dependencies are satisfied, use `yum`.
- Store the REST API endpoint URL of your Oracle Compute Cloud Service site in an environment variable named `OPC_API` (written article on how to retrieve REST endpoint).
    - ***export OPC_API=”https://api-z17.compute.em2.oraclecloud.com”***

- Store your two-part user name (`/Compute-identity_domain/user`) in an environment variable named `OPC_USER`.
  - ***export OPC_USER=/Compute-usoracle52237/prasenjit.sarkar@oracle.com***

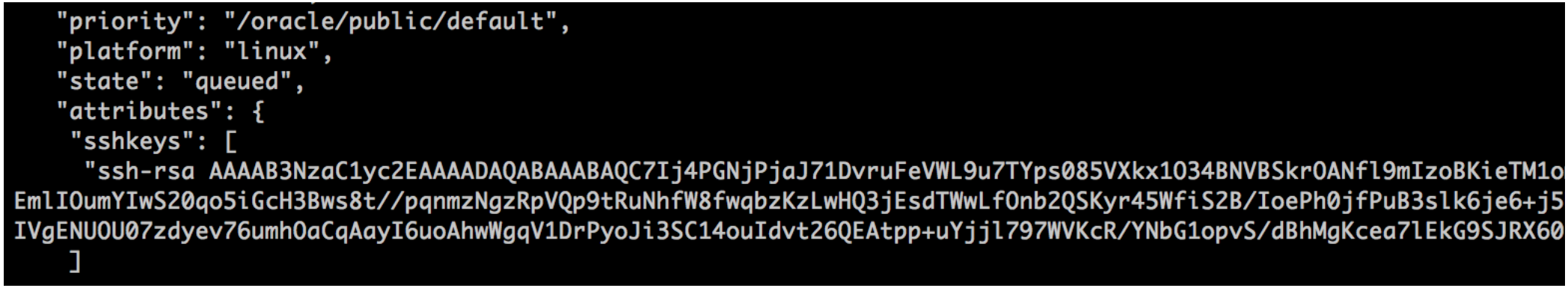
At this point, you can store your password in a plan text file and point it to the file while running the command, however, I will not use that method rather provide password every time I the command.

Now let's create an instance using launchplan. A launch plan is a JSON-formatted file that defines the properties of one or more instances. You can use a launch plan to quickly create and start multiple, non-persistent instances in Oracle Compute Cloud Service. Note that while you can reuse your launch plan JSON file to create instances afresh based on the attributes and provisioning sequence specified in the JSON file, the launch plan itself doesn't persist in Oracle Compute Cloud Service.

- Syntax to create the instance using launchplan is as follows:

```
oracle-compute launch launchplan filename -f json
```

```
[root@bitnami-rubystack-0d32 ~]# oracle-compute launch launchplan launchplan.json -f json
{
 "list": [
  {
   "domain": "compute-usoracle52237.oraclecloud.internal.",
   "placement_requirements": [
    "/system/compute/placement/default",
    "/system/compute/allow_instances"
   ],
   "ip": "0.0.0.0",
   "site": "",
   "shape": "oc3",
   "imagelist": "/oracle/public/OL-6.4-20GB-x11-RD",
   "image_format": "raw",
   "networking": {
    "eth0": {
     "vethernet": "/oracle/public/default",
     "seclists": [
      "/Compute-usoracle52237/prasenjit.sarkar@oracle.com/bitnami-rubystack-0d32"
     ],
     "model": "",
     "dns": [
      "dd9ae3.compute-usoracle52237.oraclecloud.internal."
     ],
     "nat": "ippool:/oracle/public/ippool"
    }
   },
   "hostname": "dd9ae3.compute-usoracle52237.oraclecloud.internal.",
   "quota_reservation": null,
   "disk_attach": "",
   "label": "test-vm",
```



Example of my launchplan.json is as follows. You can download it from here.

```
{
        "instances":
          [
            {
                "shape": "oc3",
                "imagelist": "/oracle/public/OL-6.4-20GB-x11-RD",
                "sshkeys": ["/Compute-usoracle52237/prasenjit.sarkar@oracle.com/bitnami-
                "name": "/Compute-usoracle52237/prasenjit.sarkar@oracle.com/test-vm",
                "label": "test-vm",
                "networking":
                    {
                      "eth0":
                        {
                          "seclists": ["/Compute-usoracle52237/prasenjit.sarkar@oracle.c
                          "nat": "ippool:/oracle/public/ippool"
                        }
                    }

            }
          ]
}
```

This launch plan will create a Oracle Linux 6.4 instance of OC3 shape that includes a public IP from the pool, opens up HTTP & SSH ports and adds SSH key to login.

OPC CLI is a pretty comprehensive tool to manage the Compute Service from your own environment and still getting all the benefits.