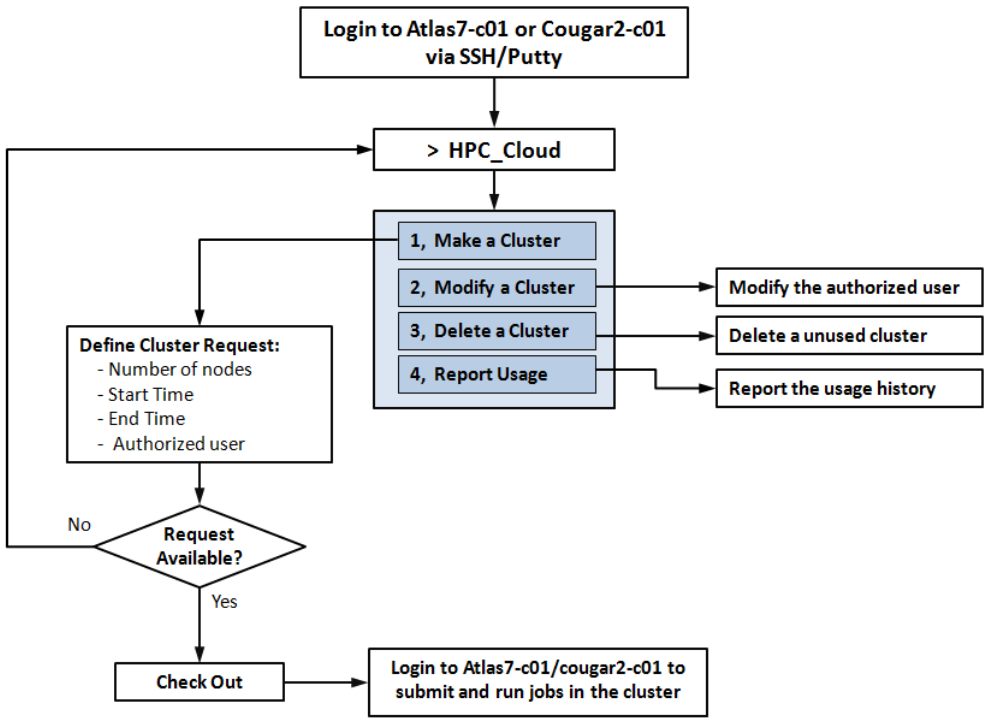
Administration User Guide on
HPC Cloud Service (Pay-per-use Cluster) Subscription

1. Overview of HPC Pay-per-use Cluster Service Subscription and Administration



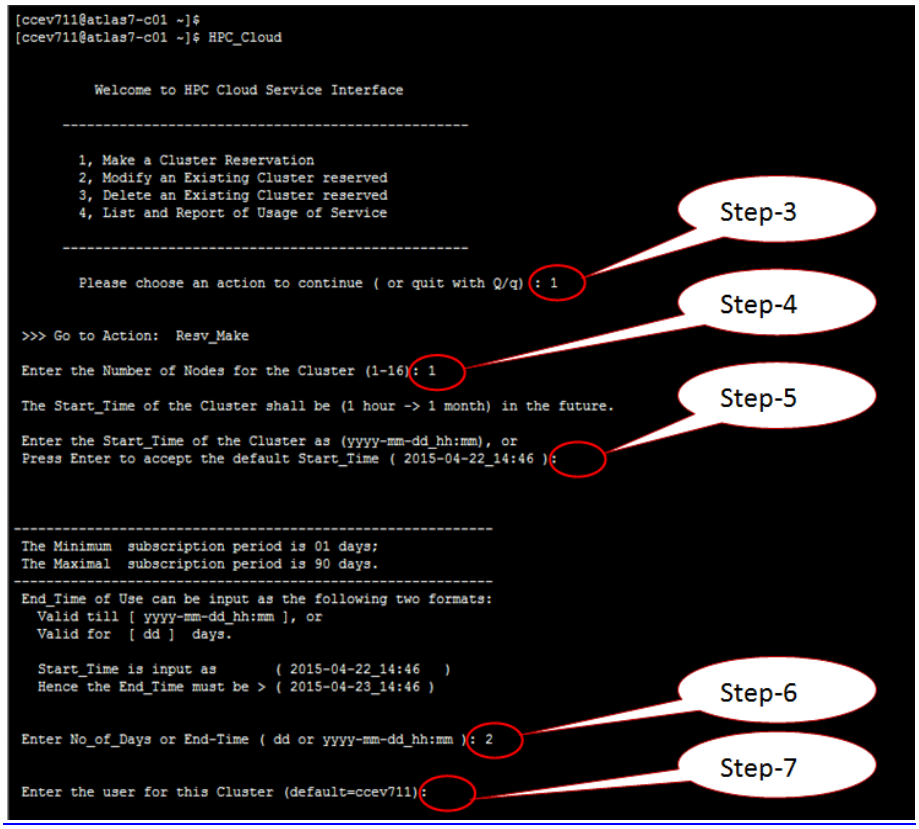
2. Administration Steps

2.1 Submit a Pay-per-use Cluster Request

1) Login to the head node Cougar2-c01 or Atlas7-c01 via SSH or Putty with NUS account/password.

2) In the command line prompt, enter command "**HPC_Cloud**" to start the HPC Cloud Service Interface.

3) Enter **1** to choose "1, Make a Cluster Reservation"



4) Enter the number of nodes for the Cluster, in the range of 1 to 16.

5) Enter the Start_Time of the Cluster in the format of y**yyy-mm-dd_hh:mm**, or just press Enter to accept the default Start_Time (one hour in the future).

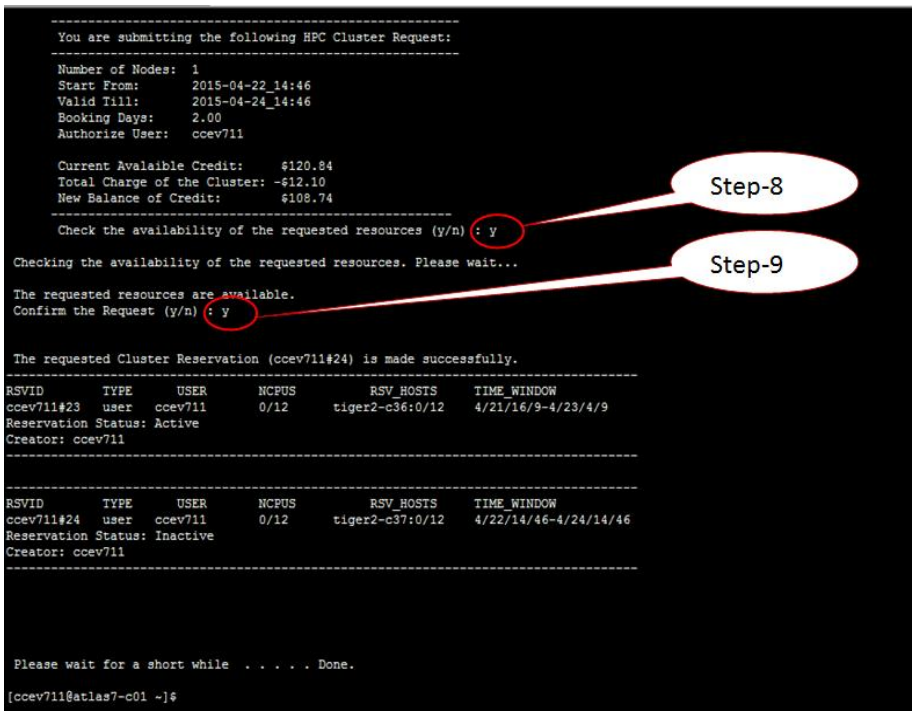
6) Enter the number of Days (**nn**) or the End_Time (**yyyy-mm-dd_hh:mm**) for the Cluster reservation, in the range of 7 to 90 days.

7) Enter the authorized user for the Cluster, or just press Enter to set as the default user as the subscriber.

8) In the Cluster Request summary page, enter "**Y**" to check the availability of the request.

9) If the requested resources are available, enter "**Y**" to confirm the request and checkout.

Then you shall see the output of the request.




```
-----------------------------------------------------
You are submitting the following HPC Cluster Request:
-----------------------------------------------------
Number of Nodes:  1
Start From:       2015-04-22_14:46
Valid Till:       2015-04-24_14:46
Booking Days:     2.00
Authorize User:   ccev711

Current Avalaible Credit:     $120.84
Total Charge of the Cluster: -$12.10
New Balance of Credit:        $108.74
-----------------------------------------------------
Check the availability of the requested resources (y/n) : y

Checking the availability of the requested resources. Please wait...

The requested resources are available.
Confirm the Request (y/n) : y


The requested Cluster Reservation (ccev711#24) is made successfully.
-------------------------------------------------------------------------------
RSVID        TYPE      USER       NCPUS          RSV_HOSTS     TIME_WINDOW
ccev711#23   user   ccev711       0/12      tiger2-c36:0/12    4/21/16/9-4/23/4/9
Reservation Status: Active
Creator: ccev711
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
RSVID        TYPE      USER       NCPUS          RSV_HOSTS     TIME_WINDOW
ccev711#24   user   ccev711       0/12      tiger2-c37:0/12    4/22/14/46-4/24/14/46
Reservation Status: Inactive
Creator: ccev711
-------------------------------------------------------------------------------



Please wait for a short while  . . . . . Done.

[ccev711@atlas7-c01 ~]$
```

10) You can list your reserved cluster(s) using command "**mycluster**".

```
[ccev711@atlas7-c01 ~]$ mycluster
-------------------------------------------------------------------------------
RSVID        TYPE      USER       NCPUS          RSV_HOSTS     TIME_WINDOW
ccev711#23   user   ccev711       0/12      tiger2-c36:0/12    4/21/16/9-4/23/4/9
Reservation Status: Active
Creator: ccev711
-------------------------------------------------------------------------------

-------------------------------------------------------------------------------
RSVID        TYPE      USER       NCPUS          RSV_HOSTS     TIME_WINDOW
ccev711#24   user   ccev711       0/12      tiger2-c37:0/12    4/22/14/46-4/24/14/46
Reservation Status: Inactive
Creator: ccev711
-------------------------------------------------------------------------------
```

2.2 Modify an existing Cluster

In the HPC Cloud Service Interface, enter **2** to modify an existing cluster. You can change the authorized user of the cluster to another user from your team.

The change does not affect the existing running jobs in the cluster, but the authorization is activated immediately and only the authorized user can submit jobs to the cluster.

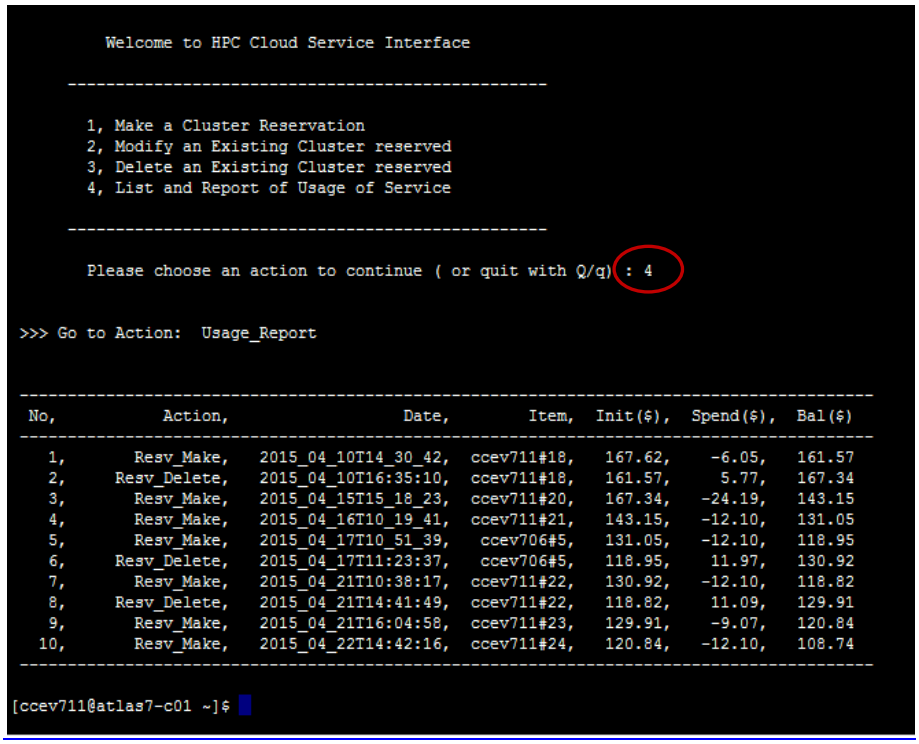
2.3 Delete an un-used Cluster

In the HPC Cloud Service Interface, enter **3** to delete an un-used cluster reservation. You will be prompt to select the cluster to delete.

You will do this when you do not need to run any jobs on the reserved cluster. You are recommended to delete it to save your credit.

2.4 Report Usage History

In the HPC Cloud Service Interface, enter **4** to list and report of usage of service under your account. The sample output is as below.



```
        Welcome to HPC Cloud Service Interface

    ------------------------------------------------

      1, Make a Cluster Reservation
      2, Modify an Existing Cluster reserved
      3, Delete an Existing Cluster reserved
      4, List and Report of Usage of Service

    ------------------------------------------------

      Please choose an action to continue ( or quit with Q/q) : 4

>>> Go to Action:  Usage_Report


-------------------------------------------------------------------------------------------
 No,          Action,                Date,        Item,  Init($),  Spend($),  Bal($)
-------------------------------------------------------------------------------------------
   1,       Resv_Make,   2015_04_10T14_30_42,  ccev711#18,   167.62,    -6.05,   161.57
   2,     Resv_Delete,   2015_04_10T16:35:10,  ccev711#18,   161.57,     5.77,   167.34
   3,       Resv_Make,   2015_04_15T15_18_23,  ccev711#20,   167.34,   -24.19,   143.15
   4,       Resv_Make,   2015_04_16T10_19_41,  ccev711#21,   143.15,   -12.10,   131.05
   5,       Resv_Make,   2015_04_17T10_51_39,   ccev706#5,   131.05,   -12.10,   118.95
   6,     Resv_Delete,   2015_04_17T11:23:37,   ccev706#5,   118.95,    11.97,   130.92
   7,       Resv_Make,   2015_04_21T10:38:17,  ccev711#22,   130.92,   -12.10,   118.82
   8,     Resv_Delete,   2015_04_21T14:41:49,  ccev711#22,   118.82,    11.09,   129.91
   9,       Resv_Make,   2015_04_21T16:04:58,  ccev711#23,   129.91,    -9.07,   120.84
  10,       Resv_Make,   2015_04_22T14:42:16,  ccev711#24,   120.84,   -12.10,   108.74
-------------------------------------------------------------------------------------------

[ccev711@atlas7-c01 ~]$
```