Cloud Application Development
Lab: CLI Nova

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Batch: - B4 Non-Hons CC&VT

Roll No.: - R2142201812

```
[root@localhost nova(keystone_admin)]# openstack flavor list
+----+-----------+-------+------+-----------+-------+-----------+
| ID | Name      |  RAM  | Disk | Ephemeral | VCPUs | Is Public |
+----+-----------+-------+------+-----------+-------+-----------+
| 1  | m1.tiny   |   512 |   1  |     0     |   1   | True      |
| 2  | m1.small  |  2048 |  20  |     0     |   1   | True      |
| 3  | m1.medium |  4096 |  40  |     0     |   2   | True      |
| 4  | m1.large  |  8192 |  80  |     0     |   4   | True      |
| 5  | m1.xlarge | 16384 | 160  |     0     |   8   | True      |
+----+-----------+-------+------+-----------+-------+-----------+
[root@localhost nova(keystone_admin)]#
```

```
                       multiple properties)
  --project <project>  Allow <project> to access private flavor (name or ID)
                       (Must be used with --private option)
  --description <description>
                       Description for the flavor.(Supported by API versions
                       '2.55' - '2.latest'
  --project-domain <project-domain>
                       Domain the project belongs to (name or ID). This can
                       be used in case collisions between project names
                       exist.

output formatters:
  output formatter options

  -f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}
                       the output format, defaults to table
  -c COLUMN, --column COLUMN
                       specify the column(s) to include, can be repeated

table formatter:
  --max-width <integer>
                       Maximum display width, <1 to disable. You can also use
                       the CLIFF_MAX_TERM_WIDTH environment variable, but the
                       parameter takes precedence.
  --fit-width          Fit the table to the display width. Implied if --max-
                       width greater than 0. Set the environment variable
                       CLIFF_FIT_WIDTH=1 to always enable
  --print-empty        Print empty table if there is no data to show.

json formatter:
  --noindent           whether to disable indenting the JSON

shell formatter:
  a format a UNIX shell can parse (variable="value")

  --prefix PREFIX      add a prefix to all variable names
[root@localhost nova(keystone_admin)]# _
```

```
[root@localhost nova(keystone_admin)]# openstack flavor create --id 10 --ram 256 --disk 2 --public
iner
+----------------------------+-------+
| Field                      | Value |
+----------------------------+-------+
| OS-FLV-DISABLED:disabled   | False |
| OS-FLV-EXT-DATA:ephemeral  | 0     |
| disk                       | 2     |
| id                         | 10    |
| name                       | tiner |
| os-flavor-access:is_public | True  |
| properties                 |       |
| ram                        | 256   |
| rxtx_factor                | 1.0   |
| swap                       |       |
| vcpus                      | 1     |
+----------------------------+-------+
[root@localhost nova(keystone_admin)]# openstack flavor list
+----+-----------+-------+------+-----------+-------+-----------+
| ID | Name      | RAM   | Disk | Ephemeral | VCPUs | Is Public |
+----+-----------+-------+------+-----------+-------+-----------+
| 1  | m1.tiny   | 512   | 1    | 0         | 1     | True      |
| 10 | tiner     | 256   | 2    | 0         | 1     | True      |
| 2  | m1.small  | 2048  | 20   | 0         | 1     | True      |
| 3  | m1.medium | 4096  | 40   | 0         | 2     | True      |
| 4  | m1.large  | 8192  | 80   | 0         | 4     | True      |
| 5  | m1.xlarge | 16384 | 160  | 0         | 8     | True      |
+----+-----------+-------+------+-----------+-------+-----------+
[root@localhost nova(keystone_admin)]#
```

```
                         use case of connecting a new server to a given port.
                         For more advanced use cases, refer to the '--nic'
                         parameter.
  --hint <key=value>     Hints for the scheduler (optional extension)
  --config-drive <config-drive-volume>|True
                         Use specified volume as the config drive, or 'True' to
                         use an ephemeral drive
  --min <count>          Minimum number of servers to launch (default=1)
  --max <count>          Maximum number of servers to launch (default=1)
  --wait                 Wait for build to complete

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                         the CLIFF_MAX_TERM_WIDTH environment variable, but the
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                         width greater than 0. Set the environment variable
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  --noindent             whether to disable indenting the JSON

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  a format a UNIX shell can parse (variable="value")

  --prefix PREFIX        add a prefix to all variable names
[root@localhost nova(keystone_admin)]# _
```

```
[root@localhost nova(keystone_admin)]# openstack keypair create mykeypair >>mykeypai.key
[root@localhost nova(keystone_admin)]#
```

```
[root@localhost nova(keystone_admin)]# openstack image list
+--------------------------------------+--------+--------+
| ID                                   | Name   | Status |
+--------------------------------------+--------+--------+
| 415e11f1-3819-4986-a42e-d2d402c60e7f | cirros | active |
+--------------------------------------+--------+--------+
[root@localhost nova(keystone_admin)]# _
```

```
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+--------------------------------------+--------+--------+
| ID                                   | Name   | Status |
+--------------------------------------+--------+--------+
| 415e11f1-3819-4986-a42e-d2d402c60e7f | cirros | active |
+--------------------------------------+--------+--------+
[root@localhost nova(keystone_admin)]# openstack network list
+--------------------------------------+----------+--------------------------------------+
| ID                                   | Name     | Subnets                              |
+--------------------------------------+----------+--------------------------------------+
| 2dd49ba0-9fe7-4013-b6ce-56afd4918096 | public   | dc785206-71c2-4709-a14b-b5f771eebf2a |
| 31ae4034-c620-4f9b-a7af-3733a5afbb0d | intnet   | 4f326dcc-f8fa-4afa-bf06-b4e93d7222db |
| 6fabb1e4-f136-4f3d-bac8-827812db943c | amantnet | 18e5742f-1781-4a24-a692-fdbf72509817 |
+--------------------------------------+----------+--------------------------------------+
[root@localhost nova(keystone_admin)]#
```

```
[root@localhost nova(keystone_admin)]# openstack server create --image cirros --key-name mykeypair -
-flavor 10 --nic net-id=31ae4034-c620-4f9b-a7af-3733a5afbb0d instance01
+-------------------------------------+------------------------------------------------------+
| Field                               | Value                                                |
+-------------------------------------+------------------------------------------------------+
| OS-DCF:diskConfig                   | MANUAL                                               |
| OS-EXT-AZ:availability_zone         |                                                      |
| OS-EXT-SRV-ATTR:host                | None                                                 |
| OS-EXT-SRV-ATTR:hypervisor_hostname | None                                                 |
| OS-EXT-SRV-ATTR:instance_name       |                                                      |
| OS-EXT-STS:power_state              | NOSTATE                                              |
| OS-EXT-STS:task_state               | scheduling                                           |
| OS-EXT-STS:vm_state                 | building                                             |
| OS-SRV-USG:launched_at              | None                                                 |
| OS-SRV-USG:terminated_at            | None                                                 |
| accessIPv4                          |                                                      |
| accessIPv6                          |                                                      |
| addresses                           |                                                      |
| adminPass                           | cM82tfMThMxE                                         |
| config_drive                        |                                                      |
| created                             | 2023-04-22T20:19:24Z                                 |
| flavor                              | tiner (10)                                           |
| hostId                              |                                                      |
| id                                  | 1d587830-d1a7-47d0-bc3f-931dab7cc73b                 |
| image                               | cirros (415e11f1-3819-4986-a42e-d2d402c60e7f)        |
| key_name                            | mykeypair                                            |
| name                                | instance01                                           |
| progress                            | 0                                                    |
| project_id                          | cd18aa9de06a4c0e88635a0f6fe9d987                     |
| properties                          |                                                      |
| security_groups                     | name='default'                                       |
| status                              | BUILD                                                |
| updated                             | 2023-04-22T20:19:24Z                                 |
| user_id                             | 9ca7b68be5f04c89ba0d7f01b55bee03                     |
| volumes_attached                    |                                                      |
+-------------------------------------+------------------------------------------------------+
[root@localhost nova(keystone_admin)]#
```

```
[root@localhost nova(keystone_admin)]# openstack server show instance01
+-------------------------------+----------------------------------------------------------+
| Field                         | Value                                                    |
+-------------------------------+----------------------------------------------------------+
| OS-DCF:diskConfig             | MANUAL                                                    |
| OS-EXT-AZ:availability_zone   | nova                                                     |
| OS-EXT-SRV-ATTR:host          | localhost.localdomain                                    |
| OS-EXT-SRV-ATTR:hypervisor_hostname | localhost.localdomain                              |
| OS-EXT-SRV-ATTR:instance_name | instance-00000007                                        |
| OS-EXT-STS:power_state        | Running                                                  |
| OS-EXT-STS:task_state         | None                                                     |
| OS-EXT-STS:vm_state           | active                                                   |
| OS-SRV-USG:launched_at        | 2023-04-22T20:20:08.000000                               |
| OS-SRV-USG:terminated_at      | None                                                     |
| accessIPv4                    |                                                          |
| accessIPv6                    |                                                          |
| addresses                     | intnet=10.5.5.15                                         |
| config_drive                  |                                                          |
| created                       | 2023-04-22T20:19:24Z                                     |
| flavor                        | tiner (10)                                               |
| hostId                        | c55068a06fd0b7c6edfe55b5f8c3691f8864350c36c50a014aa7ebc5 |
| id                            | 1d507030-d1a7-47d0-bc3f-931dab7cc73b                     |
| image                         | cirros (415e11f1-3819-4986-a42e-d2d402c60e7f)            |
| key_name                      | mykeypair                                                |
| name                          | instance01                                               |
| progress                      | 0                                                        |
| project_id                    | cd18aa9de06a4e0e88635a0f6fe9d987                         |
| properties                    |                                                          |
| security_groups               | name='default'                                           |
| status                        | ACTIVE                                                   |
| updated                       | 2023-04-22T20:20:11Z                                     |
| user_id                       | 9ca7b68be5f84c09ba0d7f01b55bee03                         |
| volumes_attached              |                                                          |
+-------------------------------+----------------------------------------------------------+
[root@localhost nova(keystone_admin)]#
```

```
[root@localhost nova(keystone_admin)]# cat /etc/nova/nova.conf | grep filter
# not filtered. An empty string means that all levels are filtered (string
[filter_scheduler]
# Deprecated group;name - DEFAULT:scheduler_available_filters
#available_filters=nova.scheduler.filters.all_filters
available_filters=nova.scheduler.filters.all_filters
# Deprecated group;name - DEFAULT:scheduler_default_filters
#enabled_filters=AvailabilityZoneFilter,ComputeFilter,ComputeCapabilitiesFilter,ImagePropertiesFilt
r,ServerGroupAntiAffinityFilter,ServerGroupAffinityFilter
enabled_filters=RetryFilter,AvailabilityZoneFilter,ComputeFilter,ComputeCapabilitiesFilter,ImagePro
ertiesFilter,ServerGroupAntiAffinityFilter,ServerGroupAffinityFilter
# The default architecture to be used when using the image properties filter.
# exception, so it is recommended to also use the MetricFilter to filter out
# Enable filter traces that contain error/exception to a separated place. For
#filter_error_trace=false
# 'setup.cfg'. If nothing is specified in this option, the 'filter_scheduler' is
#driver=filter_scheduler
driver=filter_scheduler
# number of CPUs available if using the "filter_scheduler" scheduler driver,
# metadata key of 'filter_tenant_id' set to the project of an incoming
# number to the key, such as `filter_tenant_id:123`. For more information, refer
#enable_isolated_aggregate_filtering=false
#sr_matching_filter=default-sr:true
[root@localhost nova(keystone_admin)]#
```

```
| protected      | False             |
|                |                   |
| schema         | /v2/schemas/image |
|                |                   |
| size           | None              |
|                |                   |
| status         | queued            |
|                |                   |
| tags           |                   |
|                |                   |
| updated_at     | 2023-04-22T20:22:37Z |
|                |                   |
| virtual_size   | None              |
|                |                   |
| visibility     | private           |
|                |                   |
+----------------+-------------------+
[root@localhost nova(keystone_admin)]# _
```

```
[root@localhost nova(keystone_admin)]# openstack image list
+--------------------------------------+--------+--------+
| ID                                   | Name   | Status |
+--------------------------------------+--------+--------+
| 415e11f1-3819-4986-a42e-d2d402c60e7f | cirros | active |
| 8ec2bff5-1354-4c92-a302-0129737e74f2 | snap1  | active |
+--------------------------------------+--------+--------+
[root@localhost nova(keystone_admin)]#
```

```
[root@localhost nova(keystone_admin)]# openstack aggregate create --property SSD=true agg2
+-------------------+----------------------------+
| Field             | Value                      |
+-------------------+----------------------------+
| availability_zone | None                       |
| created_at        | 2023-04-22T20:24:04.000000 |
| deleted           | False                      |
| deleted_at        | None                       |
| hosts             |                            |
| id                | 1                          |
| name              | agg2                       |
| properties        | SSD='true'                 |
| updated_at        | 2023-04-22T20:24:05.923879 |
+-------------------+----------------------------+
[root@localhost nova(keystone_admin)]# _
```

```
[root@localhost nova(keystone_admin)]# openstack console url show --novnc instance01
+-------+----------------------------------------------------------------------------+
| Field | Value                                                                      |
+-------+----------------------------------------------------------------------------+
| type  | novnc                                                                      |
|       |                                                                            |
| url   | http://10.10.20.90:6080/vnc_auto.html?path=%3Ftoken%3Db526d299-55cf-474b-80ee-316e0ec573c|
|       |                                                                            |
+-------+----------------------------------------------------------------------------+
[root@localhost nova(keystone_admin)]#
```

```
[root@localhost nova(keystone_admin)]# openstack console log show instance01
[root@localhost nova(keystone_admin)]# openstack console log show instance01
[root@localhost nova(keystone_admin)]#
```

```
|  server group create           |
|  server group delete           |
|  server group list             |
|  server group show             |
|  server image create           |
|  server list                   |
|  server lock                   |
|  server migrate                |
|  server pause                  |
|  server reboot                 |
|  server rebuild                |
|  server remove fixed ip        |
|  server remove floating ip     |
|  server remove network         |
|  server remove port            |
|  server remove security group  |
|  server remove volume          |
|  server rescue                 |
|  server resize                 |
|  server resize confirm         |
|  server resize revert          |
|  server restore                |
|  server resume                 |
|  server set                    |
|  server shelve                 |
|  server show                   |
|  server ssh                    |
|  server start                  |
|  server stop                   |
|  server suspend                |
|  server unlock                 |
|  server unpause                |
|  server unrescue               |
|  server unset                  |
|  server unshelve               |
|  usage list                    |
[root@localhost nova(keystone_admin)]#
```