



APPENDIX **A**

Terms and Configs

The following terms and configurations are provided:

Abbreviations

The following abbreviations and acronyms are defined:

- **VMs**—Virtual machines
- **ER**—Erlang Running processes
- **SD**—Socket Descriptors
- **AIO**—All in One Node OpenStack Setup
- **FD**—File Descriptors
- **SLA**—Service Level Agreement
- **Vmstat**—A tool to get snapshot of system resources in Linux
- **HA**—High availability
- **UCS**—Unified Computing System
- **vPC**—virtual Port-Channel
- **RAID**—Redundant Array of Individual Disks
- **VIC**—Virtual Interface Controller
- **VM-FEX**—Virtual Machine Fabric Extender
- **ToR**—Top of Rack
- **FCOE**—Fiber Channel over Ethernet
- **NIC**—Network Interface Card
- **AIO**—All-in-One
- **VRRP**—Virtual Router Redundancy Protocol

Configurations

The following configurations were used in use case testing:

nova.config addition

```
# Add the below contents under the default section of nova.conf
quota_cores=-1
quota_floating_ips=-1
quota_security_groups=-1
quota_security_group_rules=-1
quota_ram=-1
```

test_case2

```
{
  "NovaServers.boot_server": [
    {
      "args": {"flavor_id": 2,
               "image_id": "<< IMAGE ID >>"},
      "execution": "continuous",
      "config": {"times": 20, "active_users": 5, "tenants": 5,
                 "users_per_tenant": 1}
    }
  ]
}
```

test_case3

```
{
  "NovaServers.boot_server": [
    {
      "args": {"flavor_id": 2,
               "image_id": "<< IMAGE ID >>"},
      "execution": "continuous",
      "config": {"times": 100, "active_users": 1, "tenants": 1,
                 "users_per_tenant": 1}
    }
  ]
}
```

test_case4

```
so i{
  "NovaServers.boot_and_bounce_server": [
    {
      "args": {"flavor_id": 2,
               "image_id": "<< IMAGE ID >>",
               "actions": [{"stop_and_start": 5}]},
      "execution": "continuous",
      "config": {"times": 100, "active_users": 20, "tenants": 20,
                 "users_per_tenant": 1}
    }
  ]
}
```

test_case5-NxX

```
{
  "_comment_1" : "The number of active_users and tenants were modified as N =
20,35,40,50,45,75,100",
  "_comment_2" : "For each of the above active_users/tenants, the users_per_tenant
was modified as X = 1 and 10",
  "NovaServers.boot_server": [
```

```
{
  "args": {"flavor_id": 2,
    "image_id": "<< IMAGE ID >>"},
  "execution": "continuous",
  "config": {"times": 100, "active_users": N, "tenants": N,
    "users_per_tenant": X}
}
]
}
#NO
```

