



Manuals

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OPNFV

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OPENSTACK NOVA API FOR MARKING HOST DOWN.

1.1 Related Blueprints:

<https://blueprints.launchpad.net/nova/+spec/mark-host-down> <https://blueprints.launchpad.net/python-novaclient/+spec/support-force-down-service>

1.2 What the API is for

This API will give external fault monitoring system a possibility of telling OpenStack Nova fast that compute host is down. This will immediately enable calling of evacuation of any VM on host and further enabling faster HA actions.

1.3 What this API does

In OpenStack the nova-compute service state can represent the compute host state and this new API is used to force this service down. It is assumed that the one calling this API has made sure the host is also fenced or powered down. This is important, so there is no chance same VM instance will appear twice in case evacuated to new compute host. When host is recovered by any means, the external system is responsible of calling the API again to disable forced_down flag and let the host nova-compute service report again host being up. If network fenced host come up again it should not boot VMs it had if figuring out they are evacuated to other compute host. The decision of deleting or booting VMs there used to be on host should be enhanced later to be more reliable by Nova blueprint: <https://blueprints.launchpad.net/nova/+spec/robustify-evacuate>

1.4 REST API for forcing down:

Parameter explanations: tenant_id: Identifier of the tenant. binary: Compute service binary name. host: Compute host name. forced_down: Compute service forced down flag. token: Token received after successful authentication. service_host_ip: Serving controller node ip.

request: PUT /v2.1/{tenant_id}/os-services/force-down { "binary": "nova-compute", "host": "compute1", "forced_down": true }

response: 200 OK { "service": { "host": "compute1", "binary": "nova-compute", "forced_down": true } }

```
Example: curl -g -i -X PUT http://{service_host_ip}:8774/v2.1/{tenant_id}/os-services /force-down
-H "Content-Type: application/json" -H "Accept: application/json " -H "X-OpenStack-Nova-API-
Version: 2.11" -H "X-Auth-Token: {token}" -d '{"binary": "nova-compute", "host": "compute1",
"forced_down": true}'
```

1.5 CLI for forcing down:

```
nova service-force-down <hostname> nova-compute
```

```
Example: nova service-force-down compute1 nova-compute
```

1.6 REST API for disabling forced down:

Parameter explanations: tenant_id: Identifier of the tenant. binary: Compute service binary name. host: Compute host name. forced_down: Compute service forced down flag. token: Token received after successful authentication. service_host_ip: Serving controller node ip.

```
request: PUT /v2.1/{tenant_id}/os-services/force-down { "binary": "nova-compute", "host": "com-
pute1", "forced_down": false }
```

```
response: 200 OK { "service": { "host": "compute1", "binary": "nova-compute", "forced_down": false
} }
```

```
Example: curl -g -i -X PUT http://{service_host_ip}:8774/v2.1/{tenant_id}/os-services /force-down
-H "Content-Type: application/json" -H "Accept: application/json " -H "X-OpenStack-Nova-API-
Version: 2.11" -H "X-Auth-Token: {token}" -d '{"binary": "nova-compute", "host": "compute1",
"forced_down": false}'
```

1.7 CLI for disabling forced down:

```
nova service-force-down --unset <hostname> nova-compute
```

```
Example: nova service-force-down --unset compute1 nova-compute
```