


# Troubleshooting

[« \(advanced.html\)](#) | 
 [» \(next-steps.html\)](#) | 
  (https://bugs.launchpad.net/ironic/+filebug?field.title=Troubleshooting%20in%20Installation%20Guide%20for%20Bare%20Metal%20Service&field.comment=%0A%0A-----%0ARelease:%200.1%20on%202016-11-09%2020:35%0ASHA:%20e3bedc4eadbafbf11c1e26a216e9d40a1839a838%0ASource:%20http://git.openstack.org/cgit/openstack/ironic/tree/install-guide/source/troubleshooting.rst%0AURL: http://docs.openstack.org/project-install-guide/baremetal/draft/troubleshooting.html&field.tags=install-guide)

UPDATED: 2016-11-09 20:35

## Contents (index.html)

### Maintenance mode

Once all the services are running and configured properly, and a node has been enrolled with the Bare Metal service and is in the `available` provision state, the Compute service should detect the node as an available resource and expose it to the scheduler.

#### ✔ Note

There is a delay, and it may take up to a minute (one periodic task cycle) for the Compute service to recognize any changes in the Bare Metal service's resources (both additions and deletions).

In addition to watching `nova-compute` log files, you can see the available resources by looking at the list of Compute hypervisors. The resources reported therein should match the bare metal node properties, and the Compute service flavor.

Here is an example set of commands to compare the resources in Compute service and Bare Metal service:

```
$ ironic node-list
```

UUID	Instance UUID	Power State	Provisioning State	Maintenance
86a2b1bb-8b29-4964-a817-f90031debddb	None	power off	available	False

```
$ ironic node-show 86a2b1bb-8b29-4964-a817-f90031debddb
```

Property	Value
instance_uuid	None
properties	{u'memory_mb': u'1024', u'cpu_arch': u'x86_64', u'local_gb': u'10', u'cpus': u'1'}
maintenance	False
driver_info	{ [SNIP] }
extra	{}
last_error	None
created_at	2014-11-20T23:57:03+00:00
target_provision_state	None
driver	pxe_ipmitool
updated_at	2014-11-21T00:47:34+00:00
instance_info	{}
chassis_uuid	7b49bbc5-2eb7-4269-b6ea-3f1a51448a59
provision_state	available
reservation	None
power_state	power off
console_enabled	False
uuid	86a2b1bb-8b29-4964-a817-f90031debddb

```
$ nova hypervisor-show 1
```

Property	Value
cpu_info	baremetal cpu
current_workload	0
disk_available_least	-
free_disk_gb	10
free_ram_mb	1024
host_ip	[ SNIP ]
hypervisor_hostname	86a2b1bb-8b29-4964-a817-f90031debddb
hypervisor_type	ironic
hypervisor_version	1
id	1
local_gb	10
local_gb_used	0
memory_mb	1024
memory_mb_used	0
running_vms	0
service_disabled_reason	-
service_host	my-test-host
service_id	6
state	up
status	enabled
vcpus	1
vcpus_used	0

## Maintenance mode

Maintenance mode may be used if you need to take a node out of the resource pool. Putting a node in maintenance mode will prevent Bare Metal service from executing periodic tasks associated with the node. This will also prevent Compute service from placing a tenant instance on the node by not exposing the node to the nova scheduler. Nodes can be placed into maintenance mode with the following command.

```
$ ironic node-set-maintenance $NODE_UUID on
```

As of the Kilo release, a maintenance reason may be included with the optional `--reason` command line option. This is a free form text field that will be displayed in the `maintenance_reason` section of the `node-show` command.

```
$ ironic node-set-maintenance $UUID on --reason "Need to add ram."

$ ironic node-show $UUID
```

Property	Value
target_power_state	None
extra	{}
last_error	None
updated_at	2015-04-27T15:43:58+00:00
maintenance_reason	Need to add ram.
...	...
maintenance	True
...	...

To remove maintenance mode and clear any `maintenance_reason` use the following command.

```
$ ironic node-set-maintenance $NODE_UUID off
```

⏪ (advanced.html) ⏩ (next-steps.html) 🐛 (https://bugs.launchpad.net/ironic/+filebug?field.title=Troubleshooting%20in%20Installation%20Guide%20for%20Bare%20Metal%20Service&field.comment=%0A%0A-----%0ARElease:%200.1%20on%202016-11-09%2020:35%0ASHA:%20e3bedc4eadbafbf11c1e26a216e9d40a1839a838%0ASource:%20http://git.openstack.org/cgiit/openstack/ironic/tree/install-guide/source/troubleshooting.rst%0AURL: http://docs.openstack.org/project-install-guide/baremetal/draft/troubleshooting.html&field.tags=install-guide)

UPDATED: 2016-11-09 20:35



(https://creativecommons.org/licenses/by/3.0/) Except where otherwise noted, this document is licensed under [Creative Commons Attribution 3.0 License \(https://creativecommons.org/licenses/by/3.0/\)](https://creativecommons.org/licenses/by/3.0/). See all [OpenStack Legal Documents \(http://www.openstack.org/legal\)](http://www.openstack.org/legal).

🐛 FOUND AN ERROR? REPORT A BUG (HTTPS://BUGS.LAUNCHPAD.NET/IRONIC/+FILEBUG?FIELD.TITLE=TROUBLESHOOTING%20IN%20INSTALLATION%20GUIDE%20FOR%20BARE%20METAL%20SERVICE&FIELD.COMMENT=%0A%0A-----%0ARELEASE:%200.1%20ON%202016-11-09%2020:35%0ASHA:%20E3BEDC4EADBFBF11C1E26A216E9D40A1839A838%0ASOURCE:%20HTTP://GIT.OPENSTACK.ORG/CGIT/OPENSTACK/IRONIC/TREE/INSTALL-GUIDE/SOURCE/TROUBLESHOOTING.RST%0AURL: HTTP://DOCS.OPENSTACK.ORG/PROJECT-INSTALL-GUIDE/BAREMETAL/DRAFT/TROUBLESHOOTING.HTML&FIELD.TAGS=INSTALL-GUIDE)

❓ QUESTIONS? (HTTP://ASK.OPENSTACK.ORG)

Contents

- (index.html)
- Bare Metal service overview (get\_started.html)
  - Install and configure the Bare Metal service (install.html)
  - Integration with other OpenStack services (configure-integration.html)
  - Configure the Bare Metal service for cleaning (configure-cleaning.html)
  - Configure tenant networks (configure-tenant-networks.html)
  - Enrollment (enrollment.html)
  - Enabling HTTPS (enabling-https.html)
  - Using Bare Metal service as a standalone service (standalone.html)
  - Enabling the configuration drive (configdrive) (configdrive.html)
  - Building or downloading a deploy ramdisk image (deploy-ramdisk.html)
  - Setup the drivers for the Bare Metal service (setup-drivers.html)
  - Advanced features (advanced.html)
  - Troubleshooting ()
    - Maintenance mode
  - Next steps (next-steps.html)