



Advanced Configuration

- [Advanced Configuration, on page 1](#)
- [Configure Multicast Groups and Increase Memory for Sockets, on page 1](#)
- [Add Extra Kernel Boot Parameters, on page 2](#)

Advanced Configuration

For large installations using VXLAN encapsulation for Virtual Machine Manager (VMM) domains, you may need to make extra configurations.

You can configure the number of multicast groups to match the maximum number of endpoint groups (EPGs) for the host. You can also increase the maximum auxiliary memory for sockets and add extra kernel boot parameters to the compute or controller nodes.

Configure Multicast Groups and Increase Memory for Sockets

Procedure

Configure multicast groups and increase memory for sockets adding the following parameters to `parameter_defaults` in the deployment template:

Example:

```
parameter_defaults:
  ControllerParameters:
    ExtraSysctlSettings:
      net.ipv4.igmp_max_memberships:
        value: 4096
      net.core.optmem_max:
        value: 1310720
  ComputeParameters:
    ExtraSysctlSettings:
      net.ipv4.igmp_max_memberships:
        value: 1024
```

The IGMP maximum memberships value should be greater than or equal to the number of Neutron networks that the host has Neutron ports on. For example, if a compute host has 100 instances, and each instance is on a different Neutron network, then you must set this number to at least 100. Controller hosts running the

`neutron-dhcp-agent` must set this value to match the number of Neutron networks managed by that agent. This means that this number probably must be higher on controller hosts than compute hosts.

Add Extra Kernel Boot Parameters

You add extra kernel boot parameters to the compute or controller nodes by modifying the `resource_registry` and the `parameter_defaults` files.

Procedure

Step 1 Modify the `resource_registry` file.

Example:

```
resource_registry:
  OS::TripleO::Compute::PreNetworkConfig:
    /usr/share/openstack-tripleo-heat-templates/extraconfig/pre_network/host_config_and_reboot.yaml
```

Step 2 Modify the `parameter_defaults` file.

Example:

```
parameter_defaults:
  ComputeParameters:
    KernelArgs: "intel_iommu=on iommu=pt default_hugepagesz=1GB hugepagesz=1G
hugepages=60"
```
