

组网及说明

云网融合环境：cloudos对接VCFC配置完网络自动化后，需要配置参数，不同组网方案请按照配置指导书进行调整修改内容。

工具：使用研发提供过的update_image固化包，如需要，请拨打400到云计算二线同事获取固化工具包。

问题描述

cloudos 3.0对接vcfc后需要修改neutronserverrc,neutronagentrc容器的ml2_conf_h3c.ini文件。一般修改项有resource_mode、vds_name、enable_l3_vxlan，不同组网方式修改项不同，请严格按照指导书进行修改。一般在docker中修改的配置从，重启后会丢失配置，需要做容器镜像固化。此文档重点介绍修改参数后的固化操作。

过程分析

固化分为如下几个步骤：

- 1、解压缩固化工具包，上传到主节点/root目录下。
- 2、进入容器将pre-install.sh文件拷贝到/root/update_image/patches/replace_files/files/ 新建目录/root/scripts下
- 3、修改pre-install.sh配置参数，执行sh main.sh 固化脚本（命令如下面解决办法中）
- 4、进入容器检查参数是否已成功修改。

解决方法

- 1、进入neutronagentrc,neutronserverrc容器，如下图展示，先载入k8s的命令别名：source /opt/bin/common/tool.sh，后搜索neutron关键字的两个容器服务：pod | grep neutron（也可以使用docker ps | grep neutronagentrc/ neutronserverrc），找到后进入容器：kubectl exec -it 容器名称 bash（也是docker exec -it 容器ID bash），进入容器后到/root/scripts目录下，找到pre-startup.sh文件，注意我们要修改这个文件里的参数，不是修改ml2_conf_h3c.ini的参数，pre-startup.sh的参数修改后，容器里/etc/neutron/plugins/ml2/ml2_conf_h3c.ini里相关配置参数会同步修改。

```
[root@cloud3105 ~]# source /opt/bin/common/tool.sh
[root@cloud3105 ~]# #
[root@cloud3105 ~]# pod | grep neutron
default          neutronserverrc-tlghm      1/1      Running    0          8m          10.101.20.63      172.31.6.248
default          neutronagentrc-sg770       1/1      Running    0          8m          10.101.20.64      172.31.6.248
[root@cloud3105 ~]# kubectl exec -it neutronagentrc-sg770 bash
[root@neutron-agent ~]# cd /root/scripts/
[root@neutron-agent ~]# ls
install-vcfc-plugin.sh  pre-startup.sh  upgrade-db-to-mitaka.sh
ldap-openstack.py      region-openstack.sh  upgrade-openssl.sh
ldap-openstack.sh      tools              upgrade-packages.sh
post-startup.sh        upgrade
[root@neutron-agent ~]# cd /root/scripts/
[root@neutron-agent scripts]#
```

进入neutronagent容器后，到/root/scripts目录下，找到pre-startup.sh文件进行修改网络配置参数。

- 2、将update_image固化工具包本地解压后用FTP传输到Master节点后台/root目录。

- 3、获取容器ID如下图，将容器里要固化的文件pre-startup.sh拷贝

到update_image/patches/replace_files/files下新建的目录/root/scripts，命令用docker cp ID:/root/scripts/pre-startup.sh。（注意后面有个点）

```
[root@cloud3105 ~]# #
[root@cloud3105 ~]# cd update_image/patches/replace_files/files/root/scripts/
[root@cloud3105 scripts]# #
[root@cloud3105 scripts]# docker ps | grep neutronagentrc
5b3acc4cd99f      172.31.6.248:9999->cloudos-neutron-agent@sha256:b8ecdafbd4366f7b4272312f07eb4116
k8s_neutron-agent_neutronagentrc-sg770_default_b7fb56fc-8730-11e9-9f51-0cda411d82d4_0
aff7f2d41c1b     gcr.io/google_containers/pause-amd64:3.0
k8s_pod_neutronagentrc-sg770_default_b7fb56fc-8730-11e9-9f51-0cda411d82d4_0
[root@cloud3105 scripts]# #
[root@cloud3105 scripts]# docker cp 5b3acc4cd99f:/root/scripts/pre-startup.sh .
[root@cloud3105 scripts]# #
[root@cloud3105 scripts]# ls
pre-startup.sh
[root@cloud3105 scripts]# #
[root@cloud3105 scripts]# #
[root@cloud3105 scripts]# #
```

- 4、vim命令修改pre-startup.sh里的配置参数。

```
if [ $(cat /etc/neutron/plugins/ml2/ml2_conf_h3c.ini | grep resource_mode) ]; then
    if [ $(cat /etc/neutron/plugins/ml2/ml2_conf_h3c.ini | grep vds_name) ]; then
        openstack-config --set /etc/neutron/plugins/ml2/ml2_conf_h3c.ini VCFCONTROLLER hybrid_vnic "hybridvnicmodel"
    fi
    #if added, for evpn solution
    if [ $(cat /etc/neutron/plugins/ml2/ml2_conf_h3c.ini | grep enable_l3_vxlan) ]; then
        openstack-config --set /etc/neutron/plugins/ml2/ml2_conf_h3c.ini VCFCONTROLLER enable_l3_vxlan "S13vxlanmodel"
    fi
fi

openstack-config --set /etc/neutron/plugins/ml2/ml2_conf_h3c.ini VCFCONTROLLER vnic_type ovs
openstack-config --set /etc/neutron/plugins/ml2/ml2_conf_h3c.ini VCFCONTROLLER default_tenant_mode False
openstack-config --set /etc/neutron/plugins/ml2/ml2_conf_h3c.ini VCFCONTROLLER binddefaultrouter False
openstack-config --set /etc/neutron/plugins/ml2/ml2_conf_h3c.ini VCFCONTROLLER firewall_type CGSR
openstack-config --set /etc/neutron/plugins/ml2/ml2_conf_h3c.ini VCFCONTROLLER lb_type COSE
openstack-config --set /etc/neutron/plugins/ml2/ml2_conf_h3c.ini VCFCONTROLLER resource_mode CORE_GATEWAY
if [ $(cat /etc/neutron/plugins/ml2/ml2_conf_h3c.ini | grep enable_security_group) ]; then
    openstack-config --set /etc/neutron/plugins/ml2/ml2_conf_h3c.ini VCFCONTROLLER enable_security_group False
fi

openstack-config --set /etc/neutron/neutron.conf DEFAULT service_plugins h3c_l3_router,firewall,neutron_lbaas.services.loadbalancer.plugin.Loa
openstack-config --set /etc/neutron/neutron_lbaas.conf service_providers service_provider LOADBALANCERV2:H3C:networking_h3c_lb.h3c_lbplugin
openstack-config --set /etc/neutron/neutron_vpnaas.conf service_providers service_provider VPN:H3C:networking_h3c_vpn.h3c_vpnplugin_driver.i
```

打开文件搜索关键字，一般要修改的是resource_mode
b type
to reveal type参数
修改后保存

5、找到要固化容器neutronserverrc镜像及TAG，命令：kubectl edit neutronserverrc，搜索关键字image，复制镜像名称。

```
- name: CLOUDOS_DATABASE_TROVE_PWD
  value: cloudos
image: cloudos-neutron-server:E3105H03-V300R001B01D017-RC2
imagePullPolicy: IfNotPresent
lifecycle:
  preStop:
    exec:
      command:
        - /bin/bash
        - -c
        - /root/scripts/pre-stop.sh
  livenessProbe:
    failureThreshold: 3
    httpGet:
      host: 127.0.0.1
      path: /
      port: 9696
      scheme: HTTP
    initialDelaySeconds: 600
    periodSeconds: 60
    successThreshold: 1
    timeoutSeconds: 30
name: cloudos-neutron-server
ports:
- containerPort: 9696
  protocol: TCP
resources:
  limits:
    cpu: "4"
    memory: 8Gi
```

关键字搜索：image，找到该条信息，复制。

- 6进入root/update_image目录，执行如下命令替换镜像文件，命令格式为sh main.sh <IMAGE>:<TAG> > patches/ replace_files。例：本文固化neutronserverrc镜像命令为
sh main.sh cloudos-neutron-server:E3105H03-V300R001B01D017-RC2 patches/replace_files/

```
[root@cloud3105 update_image]# sh main.sh cloudos-neutron-server:E3105H03-V300R001B01D017-RC2 patches/replace_files/
Log file /var/log/update-image.log

*****
***** H3CloudOS Docker Image Build Tool *****
*****

The following k8s pods will be automatically restarted:
neutronserverrc-5q4wd

Continue to build cloudos-neutron-server:E3105H03-V300R001B01D017-RC2 with patches/replace_files/? (Y/N): Y
+ cat
+ echo -e '\033[32mBegin to build docker image: cloudos-neutron-server:E3105H03-V300R001B01D017-RC2-new.\033[0m'
Begin to build docker image: cloudos-neutron-server:E3105H03-V300R001B01D017-RC2-new.
+ docker build -t cloudos-neutron-server:E3105H03-V300R001B01D017-RC2-new patches/replace_files/
Sending build context to Docker daemon 9.216 kB
Step 1 : FROM cloudos-neutron-server:E3105H03-V300R001B01D017-RC2
--> 24b333fd7e11
Step 2 : COPY ./cmds.sh /root/upgrade_temp/cmds.sh
```

7、固化完成后返回结果提示upgrade docker image XXXXX finished，说明固化完成。

```
+ echo -e '\033[32mUpgrade docker image cloudos-neutron-agent:E3105H03-V300R001B01D017-RC2-new.\033[0m'
Upgrade docker image cloudos-neutron-agent:E3105H03-V300R001B01D017-RC2 finished.
[root@cloud3105 update_image]#
```

8、修改后重启下neutron-server和h3c-agent服务，命令分别为systemctl restart neutron-server、systemctl restart h3c-agent。

9、验证固化结果：进入容器，查看pre-install.sh和ml2_conf_h3c.ini文件相关参数是否已成功修改。