Kea Dhcp4 + Kea Control Agent (Kea API) Test Setup

Note: This setup works under the assumption that the Docker bridge network driver creates a new broadcast domain for its containers, isolated from any of the Docker host's physical interfaces' broadcast domains. Otherwise, the Kea Dhcp4 server could cause ip-assignment issues in the physical network!

How To Use

• Get NAV development containers up and running:

```
git clone "https://github.com/Uninett/nav.git"
cd nav
docker compose up -d
```

Note: If your local NAV repository root directory is not called nav (that is, you do not use cd nav to get to the root like above) then change all occurrences of the string 'nav_default' in this (nav-keatesting) repository's 'docker-compose.yaml' file to '<dir>_default', where <dir>> is the name of the NAV repository root directory. Otherwise, you can ignore this note.

• Get the containers for this test setup up(sic) and running:

```
# Sets up 5 dhcp clients and a kea-dhcp4 server with kea-ctrl-agent on its own bridge r
git clone "https://github.com/jorund1/nav-kea-testing.git"
cd nav-kea-testing
docker compose up -d
```

Now NAV can reach the Kea API at http://kea:8000/. To test NAV's usage of the API, add the following entry to the dhcpmetrics.conf NAV configuration file¹:

```
[http://kea:8000/]
dhcp_version=4
service=kea-management-api
```

- Run docker compose exec dhcpmetrics to check if the Kea API server is found.
- Create a VLAN in 'seeddb' with subnet containing the subnet '172.31.255.0/24' and afterwards go to the VLAN's web page to see DHCP stats for that VLAN.

¹for example by editing it in the source tree under python/nav/etc/dhcpmetrics.confand then running docker compose exec nav config install --overwrite /etc/nav