Someday, you will have to swap out dhcpd ..

Vicky Risk, Product Manager, ISC.org
NANOG 88
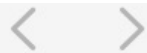
ISC Internet Systems
Consortium

ISC DHCP IS NO LONGER MAINTAINED

OS PACKAGERS ARE NO LONGER PACKAGING IT

KEA DHCP

- Mostly Open Source

  - Core is MPL 2.0 open source licensed

  - Some premium add-on modules

- REST API

- Actual documentation!!

- DHCPv4, DHCPv6, DDNS

- Many free up-to-date packages available from ISC

CONFIGURATION TRANSLATOR
LEASE FILE FORMATTER

Kea Migration Assistant (KeaMA) web interface

ISC has developed the Kea Migration Assistant (KeaMA) tool to help users migrate from the legacy ISC DHCP server to the Kea DHCP server. This tool analyzes a valid IS configuration file and provides an equivalent configuration file for a Kea DHCP server. The resulting file is a *starting point* for your Kea configuration, but it will probably re before use.

On-line migration

This web interface is the easiest way to translate your old configuration files.

Using the Tool

Upload your ISC DHCP server configuration, which is typically stored in `/etc/dhcp/dhcpd.conf`. If you use both IPv4 and IPv6 in your network, you will have two separate files. This web tool analyzes a single file at a time. Upload your file using the form below, and make sure you check the appropriate IP family (DHCPv4 or DHCPv6). There is a limit on the file size that will upload. If your dhcpd.conf file is too big you may have to run the KeaMA tool locally instead of using this web page. Once your dhcpd.conf file is uploaded, use the `migrate!` button to trigger the translation. Your results will be displayed and you can download the output file. If the file uploaded is not a valid ISC DHCP configuration file, the translation will fail and error messages will be displayed. Those can be used to correct the input configuration file so you can try again.

Data Privacy Concerns

Uploaded files are permanently removed from the server after 10 minutes. If you want to share your configuration with ISC to improve the KeaMA software, there is an option to do so: none of your information is preserved unless you specifically allow it.

Migrate!

What kind of configuration would you like to migrate:

- ⦿ DHCPv4
- ○ DHCPv6

Select your input ISC DHCP configuration file:
[Choose File] no file selected

Once you are done, hit this button: [Migrate!]

Off-Line Migration

This page offers a hosted instance of the Kea Migration Assistant (KeaMA) achieve the same result by downloading the software and running it yourse version is just provided for convenience. This migration path is more compl need to download and install this software to your system; however, the ad that your data never leaves your system. This might be preferable if you are about data privacy.

The Kea Migration Assistant can be built from source or installed as a pre-c package from ISC's package repository.

- Kea Migration Assistant packages
- Kea Migration Assistant sources

Output

Kea Migration Assistant (KeaMA) web interface

The migration process is now complete. See the details below. Please keep in mind that the results will be wiped from the server within 10 minutes, unless you press the "share with ISC" button below. Thank you for using ISC software. You can try another migration.

DHCP protocol type: v4
Migration exit code: 10

Your Kea configuration file is shown below. You have 10 minutes to [download] it.

You can also share it with ISC. If you share it with ISC we will use the information to improve the migration software. Your data will not be anonymized before sharing. If you consider anything in your configuration to be sensitive (such as addresses of services in your network, MAC addresses and hostnames of your devices etc.), please anonymize it before sharing with ISC.

```
{
  # dhcpd.conf
  #
  # Sample configuration file for ISC dhcpd
  #
  # option definitions common to all supported networks...
  /// This configuration declares some subnets but has no interfaces-config
  /// Reference Kea #245
  "Dhcp4": {
    "option-data": [
      {
        "space": "dhcp4",
        "name": "domain-name",
        "code": 15,
        "data": "example.org"
      },
      #option domain-name-servers ns1.example.org, ns2.example.org;
      {
        "space": "dhcp4",
        "name": "domain-name-servers",
        "code": 6,
        "data": "10.35.0.1, 10.35.0.2"
      }
    ],
    "valid-lifetime": 600,
    "max-valid-lifetime": 7200,
//  "config": [
//    /// log-facility is not supported
//    /// Please use the KEA_LOGGER_DESTINATION environment variable instead
```

References

- Migration resources:
  https://www.isc.org/dhcp_migration/

- On-line version of KeaMA Configuration Migration Assistant: https://dhcp.isc.org

- Lease Migration tool: https://gitlab.isc.org/isc-projects/keama-leases

- Kea Documentation: https://kea.readthedocs.io/en/kea-2.2.0/

- EOL notice: https://www.isc.org/blogs/isc-dhcp-eol/