Key Features of a Kea Support Subscription From ISC

All versions of Kea offer:

- DHCPv4 standards compliance
- DHCPv6 with prefix delegation
- Dynamic DNS (DDNS)
- Optional storage of leases and host reservations in a structured database (MySQL or PostgreSQL)
- REST management API configuration updates without restarting
- Load-balancing or active-passive pairs for high availability
- Flexible client classification with regular expression support
- Kea hooks API for easy extension and customization
- Support on most UNIX and LINUX-based operating systems

Open source for an open Internet

The core Kea DHCP software is provided under the MPL 2.0 open source license.

Confidential Technical Support

Support subscription customers get quick access to ISC's experienced technical support staff and our full-time professional DHCP software development experts, with a confidential ticket queue and shared access for your DHCP technical team. Customers can ask questions and share configuration data in a private setting.

We can also provide up to four hours of basic configuration audits and advise you on deployment options, analyze log files, and troubleshoot problems. ISC can review your standard configuration, zone, and log files and deliver a summary report indicating potential areas of concern. In some cases, we may also recommend a more comprehensive configuration audit.

Advance Security Notifications

From time to time, security issues arise with any software. To safeguard our customers' data, we use a managed disclosure process to alert customers to important security vulnerabilities. Support subscription customers receive advance notice up to 5 days before publication of a security vulnerability in Kea, with a patch that removes the vulnerability. This allows subscription customers to update their systems before the vulnerability is generally known and potentially exploited. (In some cases, it may be impossible for us to provide advance notice; in that event, we provide patch support as soon as possible.)

Available 24x7 SLA Response and Priority Fixes

We offer a range of service levels, including 24x7 on-call access for critical issues.

While we fix all serious defects no matter their source, we prioritize fixing bugs and making enhancements requested by support subscribers.

Private Repository

Subscribers get access to a private, access-controlled package repository, so you can be sure your Kea software is always up-to-date.

Kea Hooks

Kea is both flexible and customizable, via the use of "hooks." This feature lets Kea load one or more dynamically linked libraries (known as "hook libraries") and call functions in them at various points in its processing. Those functions perform whatever custom processing is required.

Please see the next page for a list of all the hook libraries available from ISC.

Kea Hook Libraries

- The **DDNS Tuning** library adds custom behaviors related to Dynamic DNS updates on a per-client basis. Its primary feature is to allow the host name used for DNS to be calculated using an expression.
- Traditionally, DHCPv4 servers use the MAC address to uniquely identify clients. However, you may not always have a listing of all MAC addresses. If your users are supplying their own devices (BYOD), you might want to identify them based on circuit ID or remote ID. In the case of a cable network, you might want to use some identifier supplied by the CMTS. With the Kea **Flexible Identifier** hook library, the system administrator can specify which field to use as the unique identifier.
- The **Forensic Logging** hook library allows administrators to record a detailed log of lease assignments and renewals into a set of log files.
- The **Host Commands** extension enables you to store host reservations in a separate backend MySQL or PostgreSQL database, and add or remove host reservations on demand, without restarting Kea.
- The **Class Commands** and **Subnet Commands** libraries provide APIs allowing you to list, add, and delete subnets, shared networks, and client classes stored in your Kea configuration. (These libraries are not required when using the Configuration Backend Commands.) The Kea **Configuration Backend Commands** extension enables you to store most of your shared Kea configuration elements in a separate MySQL or PostgreSQL backend database, and update these without restarting Kea.

These hook libraries are included with a Basic or Bronze subscription:

Premium hooks

- DDNS Tuning
- Flexible Identifier
- Forensic Logging
- Host Commands

Subscriber hooks

- Class Commands
- Configuration Backend Commands
- GSS-TSIG
- Host Cache
- Leasequery
- Limits
- Ping Check
- RADIUS
- Subnet Commands

Support subscribers at the Silver and Gold levels receive access to all the hooks listed above, plus these **Enterprise hooks**:

- Role-Based Access Control (RBAC)

- The **GSS-TSIG** library is used to authenticate DDNS updates via GSS-TSIG, using Kerberos mechanisms to retrieve dynamic keys. This capability is of particular importance to Windows networks, as this is usually the only method available in an Active Directory environment. Kea supports two Kerberos implementations: MIT and Heimdal.
- If you are already using RADIUS for access control, you can leverage that to provide DHCP access control with our Kea **RADIUS** library. The **Host Cache** library provides a way to cache responses from other hosts, improving performance when using the RADIUS hook.
- The **Leasequery** library allows you to retrieve a single lease, identified by IP address, hardware address, or client identifier, or all leases (for DHCPv4 only(. This command retrieves leases in either the default memfile storage on the Kea server, or in a separate database backend.
- The **Limits** hook library lets you apply a per-class or per-subnet limit to the rate at which packets receive a response.
- The **Ping Check** library attempts to ping the address to be offered before issuing an IPv4 lease. If it receives a response, it marks the lease as declined and discards the offer.
- **Role-Based Access Control (RBAC)** allows you to assign roles to authenticated users and specify access privileges based on those roles.

KEA DHCP

Kea DHCP vs. ISC DHCP

ISC offers two DHCP servers – the older ISC DHCP software, and the newer Kea. Both are open source software, and both support both DHCPv4 and DHCPv6 to assign IP addresses and provide configuration information to network devices such as servers, desktops, or mobile devices as they communicate on an IP network. However, there are some key differences:

ISC DHCP

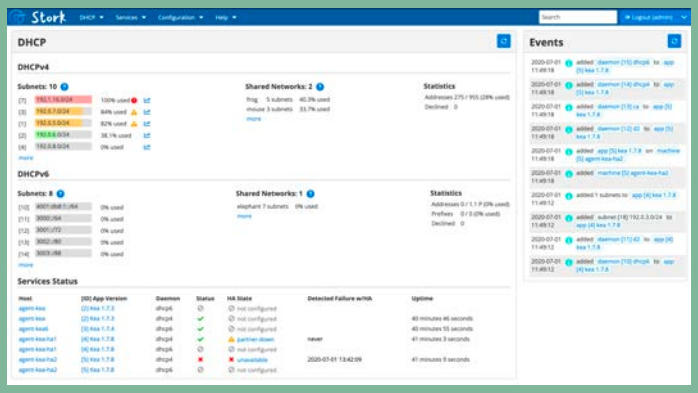
- Mature system in widespread use
- DHCPv4 and DHCPv6 are a single daemon
- Restart is required after server modifications
- Offers extensive client classification logic with a scripting language
- Implements DHCPv4 failover IETF Internet draft
- In maintenance mode, with infrequent updates and releases
- Community-contributed LDAP integration
- Proprietary OMAPI remote management interface
- Has reached End of Life (EOL)

Kea DHCP

- Newer, modern software
- DHCP server only; includes separate daemons for a DHCPv4 server, a DHCPv6 server, and dynamic DNS (DDNS)
- Does not require restart after subnet/pool additions or modifications
- JSON configuration file can be modified remotely
- Offers simpler High-Availability mechanism for failover for both DHCPv4 and DHCPv6
- Features Kea Hooks API for easy customization and extension; you can write your own hooks modules (in C++) or try some of the hooks we offer
- Provides flexible REST management API
- In active development, with monthly updates and stable releases roughly twice a year
- Optional storage of leases and host reservations in a structured MySQL or PostgreSQL database backend
- Optional configuration backend, using MySQL or PostgreSQL
- Open source management application from ISC (Stork)

Stork, a Web-based graphical dashboard for Kea

Stork makes it easy to monitor multiple Kea servers. Agents deployed on the servers relay information to a centralized management platform, providing the administrator with a quick, easy-to-use view of system status and activity.



KEA DHCP

Open source software is a secure, flexible, commercially viable solution for companies' and organizations' DHCP needs. A Kea support subscription from ISC offers you modern DHCP software and supports your staff in providing a reliable, stable network service.

Pricing is based on service level and deployment size. Support subscriptions are on an annual contract basis. Premium/subscriber/enterprise hook software is for use by subscriber organizations only and may not be redistributed.

Features	Gold	Silver (MOST POPULAR)	Bronze	Basic
Support hours	24x7	24x7	Business hours: 9 AM - 5 PM ET, Monday - Friday	-
Critical-issue response time	30 minutes	1 hour	2 hours, business hours only	-
Standard-issue response time	4 business hours	8 business hours	Next business day	-
Email support/portal access	✔	✔	✔	-
Phone support	✔	✔	-	-
Advance security incident notifications (when possible)	5 days	5 days	5 days	3 days
Kea premium hooks • DDNS Tuning • Flexible Identifier • Forensic Logging • Host Commands	✔	✔	✔	✔
Kea subscriber hooks All premium hooks, plus: • Class Commands • Configuration Backend Commands • GSS-TSIG • Host Cache • Leasequery • Limits • Ping Check • RADIUS • Subnet Commands	✔	✔	✔	✔
Kea enterprise hooks All premium and subscriber hooks, plus: • Role-Based Access Control (RBAC)	✔	✔	-	-
Consulting hours included (remote)	Up to 80	Up to 16	Available for purchase	-
Basic configuration audit	✔	✔	✔	-