



# 2021 Q3

Important updates for ISC's BIND 9, ISC DHCP, and Kea DHCP support subscribers.

## BIND/DNS News

### BIND 9.16

The BIND 9.16 branch is fully stabilized after the lengthy refactoring of the network socket interface. We have [declared 9.16.19 to be ESY](#), meaning we are no longer adding new features or refactoring, and are focusing solely on stability. This was after we [found and fixed the resolver performance regression](#) in the BIND 9.16 branch. It is now safe for more conservative users to adopt 9.16, including 9.16-S. Per our [published release plan](#), we will be ending support for the 9.11 versions at the end of 2021.

#### Recap: Features scheduled for removal in future versions

We have announced that we will be removing some features from BIND in 9.18 and later versions. These include Windows support, native PKCS#11 (we will instead support the OpenSC PKCS#11 engine), support for the "map" zone file format and the obsolete DLZ drivers (DLZ modules are unaffected). We have updated the [policy on removing options](#) to reflect the changes to the BIND release model adopted earlier this year. We track significant features removed in the [Significant Features Matrix](#).

#### Are you interested in using DNS encryption to protect user privacy?

The current 9.17 development branch implements both DNS over HTTPS (DoH) and DNS over TLS (DoT). We are continuing to improve our implementations of these, as chronicled in this [blog from the developer](#).

### NSEC3 update

Security researchers continue to probe the DNS looking for potential vulnerabilities, and they continue to find corner cases. In the latest published case, it has been shown that adding NSEC3 iterations does nothing to improve security and instead, drains CPU cycles. The latest advice is to minimize NSEC3 iterations. See our [KB article](#) explaining the details.

- ISC's engineers don't believe that NSEC3 iterations above 0 bring value; our recommendation is ideally to use 0 (additional) iterations, or at least a value less than 150.
- Modern DNSSEC-validating resolvers will treat any zones signed with NSEC3 iterations > 150 as insecure.
- Do not use NSEC3 salt.

[DNS-OARC 35a](#) took place recently. BIND users may be interested in these [notes from Geoff Huston](#) from APNIC.

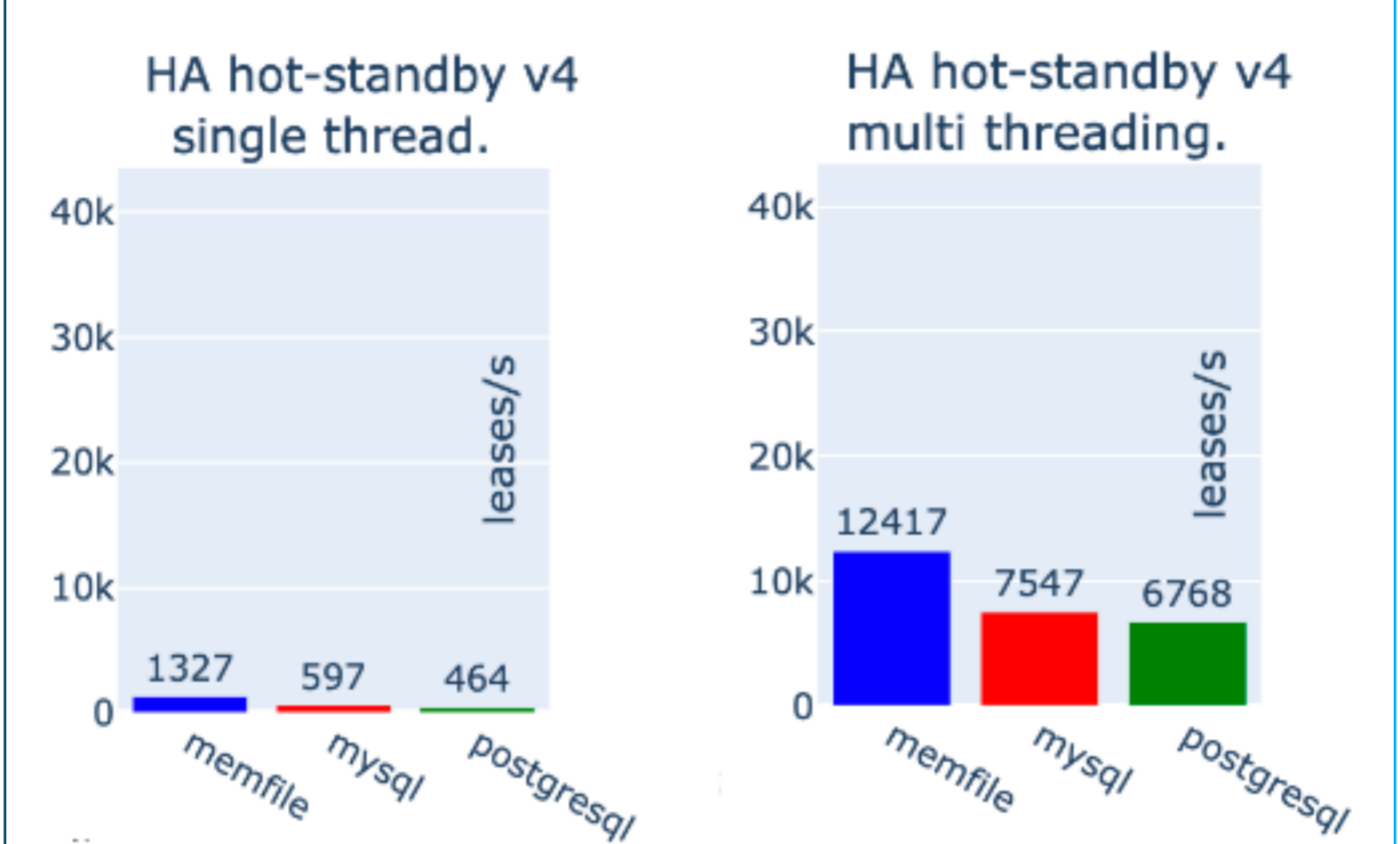


## Kea/DHCP News

### Kea 2.0 is coming in September

We are currently expecting to release Kea 2.0 at the end of September. This will be our first stable version with our full multithreading implementation. This has dramatically improved performance, particularly when using High Availability, as can be seen in recent performance test results, such as in the chart below.

#### Multi-threading increases HA performance dramatically in these results from Kea 1.9.10



(More performance data is available [here](#).)

We have updated the forensic log and configuration backend features, and made a number of bug fixes and smaller improvements.

Kea 2.0 also brings security improvements: the remote management interface can now be secured with TLS. We have added a section to the Kea ARM on [securing your installation](#), and will be continuing improvements in this area in Kea 2.1.

Per our [published release plan](#), we will end support for Kea 1.6 when we release Kea 2.0; we will continue to support Kea 1.8 for another year, until we publish the next stable version. Note that we plan to [deprecate support for the Cassandra noSQL](#) backend in Kea 2.0.

#### Stork 1.0 planned for Q4

With Stork, ISC's graphical management interface, you can now search for and view leases in Kea, as well as see the current status of host reservations. A [very brief demo](#) is available on YouTube that shows these new features. Stork is also now able to search for declined leases, which are a tell-tale sign of address duplication problems in a network. With these new features, we are nearing the end of our initial list of Kea monitoring requirements.

We are planning to release Stork 1.0 by the end of this year, concluding the basic monitoring application. Our plans are to begin adding Kea configuration editing to Stork next.

As part of ISC's commitment to this new product, we have recently hired another developer to focus exclusively on Stork.

## Updates from Support

### Upcoming Support Holiday Schedule

ISC's offices will officially be closed on the following dates:

- Thursday and Friday, November 25-26, 2021
- Friday and Monday, December 24 & 27, 2021
- Friday, December 31, 2021

For these observed holidays, the "Next Business Day" response on any tickets is deferred until the first day we are back at work again (i.e., the clock on responses stops ticking as the last working day ends and resumes on the morning of our return).

These closures do not affect Critical tickets for our Silver and Gold subscribers with 7x24-hour support. As always, Critical phone calls and tickets will be responded to per your contracted SLA. Bronze support customers (without 24x7 coverage) will receive responses to their critical tickets on the first business day following the ISC holidays.

### Meet an ISC Engineer!



Greg Choules, New Support Engineer

Greg recently joined our Support team and is already hard at work assisting customers. His years of experience make him a great asset for ISC and we know you will enjoy working with him.

Read more about Greg [here](#).

We have two current job openings at ISC: we are looking for a Quality Assurance Engineer and an Escalation Engineer, both for the Kea/DHCP team. **If you know someone who's looking, please encourage them to visit [jobs.isc.org](#) and apply!**

## Fall ISC Webinars BIND 9 Application Security

This fall's series of webinars focuses on [BIND 9 application security](#), and once again features Carsten Strotmann as presenter. For details on the individual webinar topics, or to register, please see [our website](#). All four sessions of this class are being recorded and will be available for viewing on our [presentations page](#). If you would like to be notified of new webinars, please sign up for our [training-info](#) mailing list, or monitor our social media ([Facebook](#), [LinkedIn](#), and [Twitter](#)) or website.

All our webinars are archived on [ISC's YouTube channel](#) and on our [website](#).

[View this email in your browser](#)

