

# **ISC Support Subscriber**

News

2020 Q4

For ISC's BIND 9, ISC DHCP, and Kea DHCP support subscribers.



# **BIND/DNS News**

**ISC response to SAD DNS cache poisoning attack -** <u>BLOG</u> This is a complex attack that exploits an operating system vulnerability. BIND 9 already has a number of effective defenses, but the ultimate protection is to implement DNSSEC.

Updated Serve Stale implementation in BIND 9.17.7 and 9.16.9 provides faster responses - <u>BLOG</u>

#### **Encrypted DNS Status**

BIND 9.17.7 includes our initial implementation of DNS over TCP (DoT). This release will accept DOT connections, updates dig with a "+tls' option, and accepts (but does not initiate) zone transfers over TLS. We appreciate any feedback. Work is proceeding on DoH. We are closely following work in the IETF on mechanisms for discovery of encrypted DNS services.

#### 9.16 Subscription Edition Preview is available for testing

**BIND 9.16-S1** edition is available through your support queue. We do not recommend deploying this preview version in production yet! We will be producing additional preview versions in November and December, adding DoT and DoH and our improved implementation of serve-stale. We expect to have a stable version of BIND 9.16-S edition suitable for production use in January or February, which will give you 12 months to migrate from 9.11-S.

The BIND 9 DNSSEC Guide has been completely updated and published on

<u>ReadTheDocs</u>. We do plan to move it into the BIND ARM as an Appendix, but have not done so yet.

**CentOS 6** is EOL as of November 30, 2020. We do not plan to produce BIND packages for it anymore, for any BIND version. This is per our <u>published package support policy</u>.



# **Kea/DHCP News**

## Kea 1.9.2 and 1.8.1 Released

Kea 1.8.x is the current stable version. Kea 1.6 is now the "old" stable version, scheduled to be phased out at the end of February 2021 (six months after 1.8 was released). If you are running Kea 1.6 or an even earlier version, it is time to make

plans to upgrade to 1.8. New features will be developed and added to the Kea 1.9 branch, the current development branch. The Kea Software Support Policy is <u>documented in our</u> <u>Knowledgebase</u>.

## **New Features Coming in Kea**

### **Application Security Improvements**

We recommend deployment of a reverse HTTP proxy on the Kea server to provide application security. This can be impractical for operators with large numbers of DHCP servers, so we are adding user authentication via https and a local password file to Kea. We will be leveraging this in the future to also provide simple Role-based Access Control (RBAC). With this change you will get some basic audit controls, allowing you to see the authenticated username associated with any API command received by Kea in the related logfile.

### More Flexibility in Host Reservations

Earlier Kea versions had a single configuration parameter called reservation-mode that governed whether host reservations were global (out-of-pool) or subnet-level (in-pool), and it was not possible to use different reservation types at the same time. However, in some deployments there is a need to use several types at the same time. We are replacing the reservation-mode parameter with three separate boolean parameters: reservations-global, reservations-in-subnet, and reservations-out-of-pool, each of which can be controlled independently. The new feature is being added in Kea 1.9.2 and will be in Kea 2.0, and the older reservation-mode will be removed in Kea 2.2.

### Multiple MAC reservations for the same IP

Having more than one reservation for the same IP may cause conflicts, thus Kea considers it a configuration error and doesn't allow it. However, if the client has two interfaces, but at any given time only one of them will be connected, it can be useful to have two reservations. To enable this mode of operation, a new parameter ip-reservationsunique has been added. The default behavior remains unchanged. Multiple reservations are forbidden unless explicitly allowed. Care should be taken to never allow a situation where two or more devices are active with reservations for the same IP. Kea has no way to meaningfully resolve such a conflict. When in doubt, don't use this feature!

#### New Kea Knowledgebase articles

- Using the Kea DROP Class
- Using Host Reservations in Kea
- Kea HA Timer Settings

We have also added a file to the Kea distribution with example definitions of all of the supported DHCP options.

### **Stork Management Update**

We have been updating our <u>easy-to-install packages for major operating systems</u> monthly with new releases.

# **Updates from Support**

## **Holiday Schedule**

This is a reminder to our BIND, DHCP, and Kea Subscribers of ISC support closure dates over the upcoming holiday period:



Thursday, November 26 Friday, November 27 Thursday, December 24 Friday, December 25 Friday, January 1

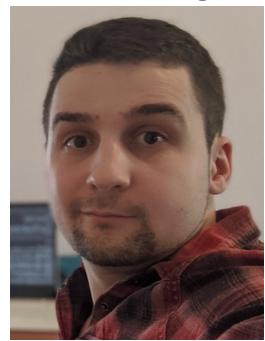
For these observed Holidays, the "Next Business Day" response on any tickets is deferred until the first day we are back at work again (i.e., the clock on responses stops ticking as the last working day ends and resumes on the morning of our return).

These closures do not affect Critical tickets for our Silver and Gold subscribers with 7x24 hour support. As always, our Critical phone numbers and ticketing system 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 holiday days.

Happy Holidays!

## Meet an ISC Engineer!



#### Andrei Pavel, New Quality Assurance & Support Engineer

We are pleased to welcome Andrei Pavel to the ISC team! He joins both the Support and DHCP development groups as a specialized resource. He will be doing more in-depth testing to reproduce reported problems, and documenting solutions. Andrei wrote the new KB article on Kea host reservations and also created the file of option examples.

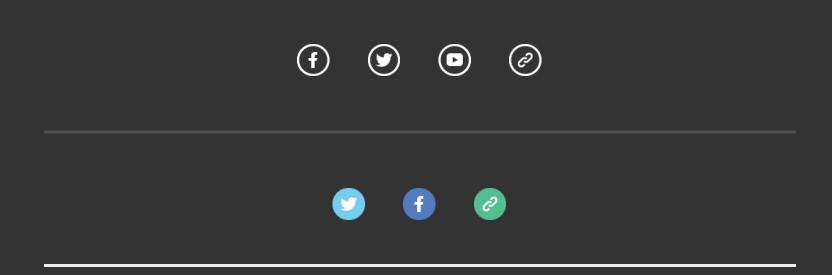
Read more about Andrei on our blog, at https://www.isc.org/blogs/isc-profile-pavel/ !

## **ISC Webinars**

We have been conducting an online Kea training series. All six episodes of this class are being recorded and will be available for viewing at https://www.isc.org/presentations/. We will be taking a break over the holidays and will resume webinars in 2021. 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 in ISC's YouTube channel and on our website.

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