

Re: Signing the root-servers.net zone

Dear Geoff,

Thank you for hosting the joint meeting between the RZERC and the RSSAC held on July 2, 2025. The RSSAC appreciated discussing its letter sent on April 11, 2025.

The RSSAC has further discussed the proposal to DNSSEC sign the root-servers.net zone and we have arrived at the following stance.

The RSSAC remains convinced that the act of signing will be of limited benefit, and that it may add small additional risks to the stability of the DNS resolution processes involving the root server system (RSS). However, If the community wants it we are confident that the RSS can adapt.

Some reasons for these conclusions:

- Resolvers that do not validate DNSSEC will (of course) not benefit from signed root-servers.net records. Resolvers that do validate DNSSEC do not rely on the mapping between server name and IP address for DNS servers for DNS reliability.
- We expect increased query volumes to the RSS as resolvers begin conducting additional validation. However, we expect this increase to be gradual, so it can be handled gracefully by the root server operators.
- More closely aligning the fate of root server addresses with the fate of root-servers.net and the .net zone might lead to decreased stability.
- It is important for the stability of the DNS that root-servers.net, signed or un-signed, remain operational in perpetuity.

The RSSAC acknowledges that signing root-servers.net would bring certain security improvements to the DNS infrastructure. However, we believe these improvements are not big enough, nor long-term enough, to warrant spending the resources.

The RSSAC believes that signing the root-servers.net zone is currently unnecessary, but we believe the RSS is able to adapt to the change if the community wants this.

On behalf of the RSSAC and with best regards,

Jeff Osborn
RSSAC Chair

Approved by the RSSAC on 29 September 2025