Statement on adding ZONEMD to the root zone

Root Server Operators August 2022

Verisign (as the Root Zone Maintainer) and ICANN (as the IANA Functions Operator) are planning to add data protections to the DNS root zone, in the form of a ZONEMD record [RFC8976]. This new record type "provides a cryptographic message digest over DNS zone data at rest". In order to ensure the stability and reliability of the Root Server System while this feature is initially deployed and tested, the Root Server Operators (RSOs) have verified that their systems are ready and able to receive and serve root zones that include a ZONEMD record. Furthermore, the RSOs agree that they will continue to distribute IANA's root zone data as received from the Root Zone Maintainer, regardless of the vaildity of the ZONEMD record, for at least one year following its first appearance in the root zone.

During this time, RSOs will separately evaluate published ZONEMD records for correctness. This is to ensure that the publication process always produces digests that are also considered valid by ZONEMD-aware name server software.

After the one year waiting period, and before enabling verification, RSOs will report on their findings. Individual RSOs may then elect to enable ZONEMD verification as a part of their internal zone distribution processes, with the full understanding of how their systems respond to possible ZONEMD verification failures and documented procedures for notifying IANA and the Root Zone Maintainer upon receipt of an invalid root zone.

The Root Server Operators request that the Root Zone Maintainer and the IANA Functions Operator communicate two (2) calendar months prior to the intended date as to when the ZONEMD record will be added to the root zone.