

Delegation Management via DNS UPDATE

draft-johani-delegation-mgmt-via-ddns-NN

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Document Status

- The draft has been updated based on the dnsdir review of the companion draft on generalized notifications (for parts that apply to both).
- The draft has been slightly extended and clarified, especially regarding alternatives for SIG(0) bootstrap.

Implementation Status

There is now an almost complete implementation in an experimental open source nameserver (“**tdns**”, written in Go).

- “Child side”: Detecting the need for synchronization with parent, looking up the parent-side **DSYNC** RRset, creating and signing the update) is complete.
- “Parent side” (receiving the update, signature validation, apply approval policy before deciding whether to accept or reject the update) is almost complete.
- “SIG(0) bootstrap” requires more implementation work to be complete.

A second implementation, in Python, is being prepared.

Implementation Status Comparison **NOTIFY** and **UPDATE**

Implementation of support for rapid, automatic synchronization of delegation data (like change to NS Rrset, glue, DNSSEC KSK rollover, etc) is nearly complete.

Nameserver (written in Go):

Scheme	Child-side	Parent-side	Scanner
NOTIFY	DONE	DONE	75% done
UPDATE	DONE	DONE	not needed
SIG(0) KEY Bootstrap	DONE	25% done	not needed

CLI tools (Python and Go):

Scheme	Child-side	Parent-side
NOTIFY	Both DONE	Go DONE
UPDATE	Go DONE	Go DONE

WG Adoption

I consider the draft to be rather stable at this point.

If the parent publishes a **DSYNC** RRset that announces support for **UPDATE**-based synchronization then the implementation “just works”:

To move this work forward WG adoption is really important.

I therefore humbly suggest WG adoption of this draft.