#### NAME

ldns\_dnssec\_zone\_sign, ldns\_dnssec\_zone\_sign\_nsec3, ldns\_dnssec\_zone\_mark\_glue, ldns\_dnssec\_name\_node\_next\_nonglue, ldns\_dnssec\_zone\_create\_nsecs, ldns\_dnssec\_remove\_signatures, ldns\_dnssec\_zone\_create\_rrsigs - sign ldns\_dnssec\_zone

### SYNOPSIS

#include <stdint.h>
#include <stdbool.h>

#include <ldns/ldns.h>

ldns\_status ldns\_dnssec\_zone\_sign(ldns\_dnssec\_zone \*zone, ldns\_rr\_list \*new\_rrs, ldns\_key\_list \*key\_list, int (\*func)(ldns\_rr \*, void \*), void \*arg);

ldns\_status ldns\_dnssec\_zone\_sign\_nsec3(ldns\_dnssec\_zone \*zone, ldns\_rr\_list \*new\_rrs, ldns\_key\_list \*key\_list, int (\*func)(ldns\_rr \*, void \*), void \*arg, uint8\_t algorithm, uint8\_t flags, uint16\_t iterations, uint8\_t salt\_length, uint8\_t \*salt);

ldns\_dnssec\_zone\_mark\_glue();

ldns\_rbnode\_t\* ldns\_dnssec\_name\_node\_next\_nonglue(ldns\_rbnode\_t \*node);

ldns\_status ldns\_dnssec\_zone\_create\_nsecs(ldns\_dnssec\_zone \*zone, ldns\_rr\_list \*new\_rrs);

ldns\_dnssec\_rrs\* ldns\_dnssec\_remove\_signatures(ldns\_dnssec\_rrs \*signatures, ldns\_key\_list \*key\_list, int (\*func)(ldns\_rr \*, void \*), void \*arg);

ldns\_status ldns\_dnssec\_zone\_create\_rrsigs(ldns\_dnssec\_zone \*zone, ldns\_rr\_list \*new\_rrs, ldns\_key\_list \*key\_list, int (\*func)(ldns\_rr \*, void\*), void \*arg);

### DESCRIPTION

*ldns\_dnssec\_zone\_sign()* signs the given zone with the given keys

zone: the zone to sign
key\_list: the list of keys to sign the zone with
new\_rrs: newly created resource records are added to this list, to free them later
func: callback function that decides what to do with old signatures This function takes an ldns\_rr\*
and an optional void \*arg argument, and returns one of four values:
LDNS\_SIGNATURE\_LEAVE\_ADD\_NEW: leave the signature and add a new one for the

corresponding key LDNS\_SIGNATURE\_REMOVE\_ADD\_NEW: remove the signature and replace is with a new one from the same key LDNS\_SIGNATURE\_LEAVE\_NO\_ADD: leave the signature and do not add a new one with the corresponding key LDNS\_SIGNATURE\_REMOVE\_NO\_ADD: remove the signature and do not replace

**arg**: optional argument for the callback function Returns LDNS\_STATUS\_OK on success, an error code otherwise

ldns\_dnssec\_zone\_sign\_nsec3() signs the given zone with the given new zone, with NSEC3

zone: the zone to sign
key\_list: the list of keys to sign the zone with
new\_rrs: newly created resource records are added to this list, to free them later
func: callback function that decides what to do with old signatures
arg: optional argument for the callback function
algorithm: the NSEC3 hashing algorithm to use
flags: NSEC3 flags
iterations: the number of NSEC3 hash iterations to use
salt\_length: the length (in octets) of the NSEC3 salt
salt: the NSEC3 salt data
Returns LDNS\_STATUS\_OK on success, an error code otherwise

*ldns\_dnssec\_zone\_mark\_glue()* 

*ldns\_dnssec\_name\_node\_next\_nonglue()* Finds the first dnssec\_name node in the rbtree that is not occluded. It \*does\* return names that are partially occluded.

**node**: the first node to check Returns the first node that has not been marked as glue, or NULL if not found (TODO: make that LDNS\_RBTREE\_NULL?)

ldns\_dnssec\_zone\_create\_nsecs() Adds NSEC records to the given dnssec\_zone

zone: the zone to add the records to
new\_rrs: ldns\_rr's created by this function are added to this rr list, so the caller can free them later
Returns LDNS\_STATUS\_OK on success, an error code otherwise

*ldns\_dnssec\_remove\_signatures()* remove signatures if callback function tells to

signatures: list of signatures to check, and possibly remove, depending on the value of the callback

key\_list: these are marked to be used or not, on the return value of the callbackfunc: this function is called to specify what to do with each signature (and corresponding key)arg: Optional argument for the callback functionReturns s pointer to the new signatures rrs (the original passed to this function may have been removed)

ldns\_dnssec\_zone\_create\_rrsigs() Adds signatures to the zone

zone: the zone to add RRSIG Resource Records to
new\_rrs: the RRSIG RRs that are created are also added to this list, so the caller can free them later
key\_list: list of keys to sign with.
func: Callback function to decide what keys to use and what to do with old signatures
arg: Optional argument for the callback function
Returns LDNS\_STATUS\_OK on success, error otherwise

### AUTHOR

The ldns team at NLnet Labs.

## **REPORTING BUGS**

Please report bugs to dns-team@nlnetlabs.nl or on GitHub at https://github.com/NLnetLabs/ldns/issues

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### SEE ALSO

ldns\_dnssec\_zone. And peridoc Net::DNS, RFC1034, RFC1035, RFC4033, RFC4034 and RFC4035.

### REMARKS

This manpage was automatically generated from the ldns source code.