NAME

ldns_dnssec_data_chain, ldns_dnssec_data_chain_struct, ldns_dnssec_trust_tree - data structures for validation chains

SYNOPSIS

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

#include <ldns/ldns.h>

 ldns_dnssec_data_chain_struct();

DESCRIPTION

ldns_dnssec_data_chain

Chain structure that contains all DNSSEC data needed to
verify an rrset
struct ldns_dnssec_data_chain_struct
{

        ldns_rr_list *rrset;
        ldns_rr_list *signatures;
        ldns_rr_type parent_type;
        ldns_dnssec_data_chain *parent;
        ldns_pkt_rcode packet_rcode;
        ldns_rr_type packet_qtype;
        bool packet_nodata;
};

typedef struct ldns_dnssec_data_chain_struct ldns_dnssec_data_chain;

ldns_dnssec_data_chain_struct()

ldns_dnssec_trust_tree

Tree structure that contains the relation of DNSSEC data,
and their cryptographic status.

This tree is derived from a data_chain, and can be used
to look whether there is a connection between an RRSET
and a trusted key. The tree only contains pointers to the
data_chain, and therefore one should *never* free() the

data_chain when there is still a trust tree derived from
that chain.

Example tree:
```
  key   key   key
   \    |    /
    \   |   /
     \  |  /
        ds
        |
       key
        |
       key
        |
        rr
```

For each signature there is a parent; if the parent
pointer is null, it couldn't be found and there was no
denial; otherwise is a tree which contains either a
DNSKEY, a DS, or a NSEC rr
struct ldns_dnssec_trust_tree_struct
{
          ldns_rr *rr;
          /* the complete rrset this rr was in */
          ldns_rr_list *rrset;
          ldns_dnssec_trust_tree *parents[LDNS_DNSSEC_TRUST_TREE_MAX_PARENTS];
          ldns_status parent_status[LDNS_DNSSEC_TRUST_TREE_MAX_PARENTS];
          /** for debugging, add signatures too (you might want
             those if they contain errors) */
          ldns_rr *parent_signature[LDNS_DNSSEC_TRUST_TREE_MAX_PARENTS];
          size_t parent_count;
};

typedef struct ldns_dnssec_trust_tree_struct ldns_dnssec_trust_tree;

AUTHOR
The ldns team at NLnet Labs.

REPORTING BUGS

Please report bugs to ldns-team@nlnetlabs.nl or in our bugzilla at
http://www.nlnetlabs.nl/bugs/index.html

COPYRIGHT

Copyright (c) 2004 - 2006 NLnet Labs.

Licensed under the BSD License. There is NO warranty; not even for MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE.

SEE ALSO

ldns_dnssec_data_chain_new, *ldns_dnssec_trust_tree_new*, *ldns_dnssec_verify_denial*. And **perldoc
Net::DNS**, **RFC1034**, **RFC1035**, **RFC4033**, **RFC4034** and **RFC4035**.

REMARKS

This manpage was automatically generated from the ldns source code.