



Rocky Enterprise Linux 9.2 Manual Pages on command 'Net::DNS::SEC::Keyset.3pm'

C:\>man Net::DNS::SEC::Keyset.3pm

Net::DNS::SEC::Keyset(3pm) User Contributed Perl Documentation Net::DNS::SEC::Keyset(3pm)

NAME

Net::DNS::SEC::Keyset - DNSSEC Keyset object class

SYNOPSIS

```
use Net::DNS::SEC::Keyset;
```

DESCRIPTION

A keyset is an "administrative" unit used for DNSSEC maintenance.

This class provides interfaces for creating, reading and writing keysets.

Object methods are provided to extract DNSKEY, RRSIG and DS records.

Note that this class is still being developed. Attributes and methods are subject to change.

new (from file)

```
$keyset = Net::DNS::SEC::Keyset->new( $filename );  
$keyset = Net::DNS::SEC::Keyset->new( $filename, $directory );  
die Net::DNS::SEC::Keyset->keyset_err unless $keyset;
```

Constructor method which reads the specified keyset file and returns a keyset object.

The optional second argument specifies the filename base directory.

Sets keyset_err and returns undef on failure.

new (by signing keys)

```
$keyset = Net::DNS::SEC::Keyset->new( [@keyrr], $privatekeypath );
```

Creates a keyset object from the keys provided through the reference to an array of

Net::DNS::RR::DNSKEY objects.

The method will create and self-sign the whole keyset. The private keys as generated by the BIND dnssec-keygen tool are assumed to be in the current directory or, if specified, the directory indicated by \$privatekeypath.

Sets keyset_err and returns undef on failure.

new (from key and sig RRsets)

```
$keyset = Net::DNS::Keyset->new( [@keyrr], [@sigrr] );
```

Creates a keyset object from the keys provided through the references to arrays of Net::DNS::RR::DNSKEY and Net::DNS::RR::RRSIG objects.

Sets keyset_err and returns undef on failure.

new (from Packet)

```
$res = Net::DNS::Resolver->new;
```

```
$res->dnssec(1);
```

```
$packet = $res->query ( "example.com", "DNSKEY", "IN" );
```

```
$keyset = Net::DNS::SEC::Keyset->new( $packet )
```

Creates a keyset object from a Net::DNS::Packet that contains the answer to a query for the apex key records.

This is the method you should use for automatically fetching keys.

Sets keyset_err and returns undef on failure.

keys

```
@keyrr = $keyset->keys;
```

Returns an array of Net::DNS::RR::DNSKEY objects.

sigs

```
@sigrr = $keyset->sigs;
```

Returns an array of Net::DNS::RR::RRSIG objects.

extract_ds

```
@ds = $keyset->extract_ds;
```

```
die $keyset->keyset_err unless @ds;
```

Extracts DS records from the keyset. Note that the keyset will be verified during extraction. All keys will need to have a valid self-signature.

The method sets keyset_err if verification fails.

verify

```
@keytags = $keyset->verify();
```

```
die $keyset->keyset_err unless @keytags;
```

```
$keyset->verify( $keytag ) || die $keyset->keyset_err;
```

If no arguments are given:

? Verifies if all signatures present verify the keyset.

? Verifies if there are DNSKEYs with the SEP flag set, there is at least one RRSIG made using that key.

? Verifies that if there are no DNSKEYs with the SEP flag set there is at least one RRSIG made with one of the keys from the keyset.

If an argument is given, it should be the numeric keytag of the key in the keyset which will be verified using the corresponding RRSIG.

The method returns a list of keytags of verified keys in the keyset.

The method sets keyset_err and returns empty list if verification fails.

keyset_err

```
$keyset_err = Net::DNS::SEC::Keyset->keyset_err;
```

```
$keyset_err = $keyset->keyset_err;
```

Returns the keyset error string.

string

```
$string = $keyset->string;
```

Returns a string representation of the keyset.

print

```
$keyset->print;      # similar to print( $keyset->string )
```

Prints the keyset.

writekeyset

```
$keyset->writekeyset;
```

```
$keyset->writekeyset( $path );
```

```
$keyset->writekeyset( $prefix );
```

```
$keyset->writekeyset( $prefix, $path );
```

Writes the keyset to a file named "keyset-<domain>." in the current working directory or directory defined by the optional \$path argument.

The optional \$prefix argument specifies the prefix that will be prepended to the domain name to form the keyset filename.

COPYRIGHT

Copyright (c)2002 RIPE NCC. Author Olaf M. Kolkman

Portions Copyright (c)2014 Dick Franks

All Rights Reserved

LICENSE

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of the author not be used in advertising or publicity pertaining to distribution of the software without specific prior written permission.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

perl v5.30.0

2020-02-08

Net::DNS::SEC::Keyset(3pm)