

about:config

J Down left MB	- nächster Punkt
K Up right MB	- vorhergehender Punkt
Right	- nächste Seite
Left	- vorhergehende Seite
<Return>	- zur Seite springen im Inhaltsverzeichnis
O	- Outline Mode on/off
T escape F5	- Inhaltsverzeichnis on/off
S .	- zwischen Styles rotieren

:begin

YAML, Net::DNS, UTF8
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Background

- Test mit Mail::SPF::Iterator
- Fake DNS Server via Net::DNS
- Testspec via YAML (offizielle SPF Testsuite)
- Upgrade OpenBSD 4.9 -> 5.0

Bummer!

```
Exception: incomplete data at ...Net/DNS/RR.pm line 565.  
caught at ...Net/DNS/RR.pm line 517
```

```
557 my ($name, $index) = Net::DNS::Packet::dn_expand($data, $offset);  
558 die 'Exception: corrupt or incomplete data' unless $index;  
559  
560 my $rdindex = $index + PACKED_LENGTH;  
561 die 'Exception: incomplete data' if length $$data < $rdindex;  
562 my ($type, $class, $ttl, $rdlength) = unpack("@$index n2 N n", $$data);  
563  
564 my $next = $rdindex + $rdlength;  
565 die 'Exception: incomplete data' if length $$data < $next;
```

nach langer Zeit..

```

sub dn_expand {
#FYI    my ($packet, $offset) = @_;
-      return dn_expand_XS(@_) if $Net::DNS::HAVE_XS;
+ #      return dn_expand_XS(@_) if $Net::DNS::HAVE_XS;
#      warn "USING PURE PERL dn_expand()\n";
      return dn_expand_PP(@_, {} );    # $packet, $offset, anonymous hash
}

```

strategische printfs

```

void
dn_expand_XS(sv_buf, offset)
    ...
    buf = (u_char *) SvPV(sv_buf, len);
    pos = netdns_dn_expand(buf, buf+len , buf+offset,
        &name[0], MAXDNAME);

```

- len ausgeben lassen
- differiert zwischen OpenBSD 4.9 und 5.0 !
- jedoch Net::DNS Version ist die gleiche
- gleiche Probleme mit frischem Net::DNS Install

Dump, Devel::Peek

```

SV = PV(0x1c82bc8) at 0x1ca1120
FLAGS = (PADMY,POK,pPOK,UTF8)
...
CUR = 120

```

- aber length(\$buf) == 118 !
- und was macht da das UTF8-Flag

YAML Changelog

```

version: 0.71
date: Sun Jan 3 12:25:00 AEST 2010
changes:
- Set file encoding to UTF-8 in LoadFile/DumpFile (RT#25434) ...
...

```

POC

```

use Encode;

```

```
my $x = 'ab';
Encode::_utf8_on($x);
$x .= "cd\x8a\x83ab";
Devel::Peek::Dump($x);
```

Resultat

```
SV = PV(0x1c82bc8) at 0x1ca1120
REFCNT = 1
FLAGS = (PADMY, POK, pPOK, UTF8)
PV = 0x1c9b6a0 "abcd\302\212\302\203ab"\0 [UTF8 "abcd\x{8a}\x{83}ab"]
CUR = 10      <<<< length($x) == 8!
LEN = 16
```

Zusammenfassung

- Characterstring != Bytes
- Characterstring + Bytes -> Upgrade Bytes als Char
- UTF8-String + Bytes -> Upgrade Bytes zu UTF8
- SvLEN = Menge an Bytes, nicht Characters